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January 29, 2009

Inspector General

United States Department of Defense



Procurement and Delivery of Joint Service Armor Protected Vehicles

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INSPECTOR GENERAL
DEPARTMENT OF DEFENSE
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January 29, 2009

MEMORANDUM FOR NAVAL INSPECTOR GENERAL
AUDITOR GENERAL, DEPARTMENT OF THE ARMY
COMMANDER, MARINE CORPS SYSTEMS COMMAND

SUBJECT: Procurement and Delivery of Joint Service Armor Protected Vehicles
(Report No. D-2009-046)

We are providing this report for your information and use. We considered management comments on the draft of this report when preparing the final report.

Comments on the draft of this report conformed to the requirements of DoD Directive 7650.3 and left no unresolved issues. Therefore, no additional comments are required.

We appreciate the courtesies extended to the staff. Questions should be directed to me at (703) 604-9201 (DSN 664-9201).

Richard B. Jolliffe
Assistant Inspector General
Acquisition and Contract Management

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Results in Brief: Procurement and Delivery of Joint Service Armor Protected Vehicles

What We Did

Our overall audit objective was to determine whether the Mine Resistant Ambush Protected (MRAP) vehicle program office effectively procured armored vehicles in accordance with Federal Acquisition Regulation and DoD requirements. Specifically, we determined whether the program office took appropriate actions to accelerate vehicle delivery to users. We also reviewed the Services' requirements for MRAP and High Mobility Multipurpose Wheeled Vehicles (HMMWV).

What We Found

MRAP officials took effective actions to accelerate delivery of MRAP vehicles and addressed material shortfalls. In addition, Army and Marine Corps officials developed MRAP requirements and Up-Armored HMMWV requirements based on theater commander assessments.

Marine Corps Systems Command (MCSC) officials did not properly determine that contract prices were fair and reasonable when they awarded nine firm-fixed-price indefinite-delivery, indefinite-quantity contracts in January 2007 for MRAP vehicles. In addition, MCSC officials did not choose an appropriate contract type for the MRAP procurement as executed. Subsequent to the award of the nine contracts, MCSC contracting officials did not attempt to obtain cumulative quantity pricing discounts from one of the contractors.

Consequently, DoD has no assurance that prices paid were fair and reasonable and likely paid more than it should have for MRAP vehicles. Additionally, contracting officials' acceptance

of offered prices without attempting to obtain appropriate volume discounts may have resulted in potential lost savings of \$45.6 million.

What We Recommend

We recommend that the Commander, MCSC direct the Assistant Commander for Contracts to instruct contracting officers to follow Federal Acquisition Regulation requirements for determining fair and reasonable prices, to establish procedures that address seeking volume discounts when appropriate, and open discussions to negotiate greater discounts on current contracts.

Client Comments and Our Response

The comments from the Assistant Secretary of the Navy (Research, Development, and Acquisition) [ASN(RDA)]; and the Commander, MCSC were responsive. The Commander, MCSC agreed with all of the recommendations; however, both the ASN(RDA) and the Commander, MCSC disagreed with the primary issue in Finding C on fair and reasonable pricing. Consequently, we requested a policy decision from the Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics. The Director, Defense Procurement agreed, stating that the contracting officer cannot assume prices are fair and reasonable simply because multiple firm-fixed-price offers were received. Please see the recommendations table on the back of this page. Please see the Finding C section of the report for a detailed discussion of the client comments and our response.

Recommendations Table

Client	Recommendations Requiring Comment	No Additional Comments Required
Commander of the Marine Corps Systems Command		1., 2., 3., 4., 5., 6., 7., 8., and 9.

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Introduction

Objectives

Our overall audit objective was to determine whether the Mine Resistant Ambush Protected (MRAP) vehicle program office effectively procured armored vehicles in accordance with Federal Acquisition Regulation and DoD requirements. Specifically, we reviewed program administration to determine whether the program office took appropriate actions to accelerate vehicle delivery to users. An additional audit objective was to review the Services' requirements for MRAP and High Mobility Multipurpose Wheeled Vehicles (HMMWV).

Background

Since the beginning of the Global War on Terror, DoD has depended upon the Up-Armored HMMWV (UAH) and other armored transport vehicles to ensure the safety of military personnel. As enemy tactics reached unprecedented levels of lethality, specifically with the introduction of improvised explosive devices (IED), DoD officials recognized the need for an armored vehicle solution beyond the capabilities of the UAH that would increase the survivability of military personnel in theater. The UAH could no longer be modified to meet the threat of certain enemy attacks without compromising essential vehicle capabilities.

(FOUO) [REDACTED]

[REDACTED] Despite its well-documented success rate, DoD officials are in agreement that the MRAP vehicle does not replace the need for other combat and tactical vehicles and that there is no single solution to the threat of IEDs. While these programs provide balanced capabilities now and into the future, MRAP vehicles are recognized as a separate initiative that addresses a specific threat. Taking these and other facts into account, there remains a critical need for both UAH and MRAP vehicles.

As of July 7, 2008, Congress has funded \$22.4 billion for the MRAP vehicle program to include vehicles, testing, Government-furnished equipment, spiral development, logistics support, and transportation costs.

MRAP Vehicle Protection

MRAP vehicles provide a solution for the specific theater operational need for a protected vehicle capability that increases survivability of forces operating in hazardous areas against threats including mines, IEDs, and small arms fire. The Commandant of the

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Marine Corps stated that Multi-National Forces-West (MNF-W)¹ estimated that the use of MRAP vehicles could reduce casualties in vehicles due to IED attack by as much as 80 percent. All tactical wheeled vehicles must balance protection, performance, and payload; however, protection is the prominent component of the MRAP vehicle. Such a tradeoff provides an operational specific capability that will augment, but not replace, HMMWVs.

MRAP Vehicle Design and Mission

MRAP vehicles have v-shaped hulls and are designed to protect the crew from mine blasts and both fragmentary and direct fire weapons. The MRAP family of vehicles consists of three categories covering a range of missions:

MRAP Category (CAT) I is intended to support combat operations in urban environments and other restricted or confined spaces with the capability of transporting six personnel. Missions in this category include mounted patrols, reconnaissance, communications, and command and control.

MRAP CAT II is intended to support multi-mission operations with the capability of transporting 10 personnel. Missions in this category are convoy lead, troop transport, ambulatory, explosive ordnance disposal, and combat engineering.

MRAP CAT III is intended to support mine and IED clearance operations with the capability of transporting 12 personnel.



Figure 1: International Military and Government MRAP CAT I Variant

¹ MNF-W performs missions in Iraq under the Operation Iraqi Freedom initiative.

Procurement History

The MNF-W issued two Joint Universal Operational Needs Statements (JUONS) on May 21, 2006, and July 10, 2006, respectively, documenting the need for 185 Medium Mine Protected Vehicles and 1,000 MRAP vehicles.² United States Central Command approved the total quantity of 1,185 MRAP vehicles on October 26, 2006.

In order to support rapid fielding of MRAP vehicles, Marine Corps Systems Command (MCSC) awarded a sole-source, indefinite-delivery, indefinite-quantity (IDIQ) contract to Force Protection Industries, Inc. (FPII), on November 9, 2006, for up to 200 Joint Explosive Ordnance Disposal Rapid Response Vehicles (JERRV) (MRAP CAT II vehicles) and 91 Buffalo Mine Protected Clearance Vehicles (MRAP CAT III vehicles). The justification for the sole-source award stated that FPII was the only company with the demonstrated capability to produce MRAP vehicles in a time frame to support the Global War on Terror and that award of the contract to another source would result in unacceptable delays due to the necessity of performing mobility and survivability testing. As of March 31, 2008, MCSC placed 7 delivery orders against the FPII contract for [REDACTED] JERRVs and [REDACTED] Buffalo Mine Protected Clearance Vehicles at a cost of \$198 million. No delivery orders for the JERRVs were placed on this contract after December 2006.

Concurrent with the sole-source award to FPII, MCSC issued a Request for Proposals in November 2006 for CAT I and CAT II vehicles needed to meet the JUONS requirement for 1,185 MRAP vehicles. The Request for Proposals was issued based on responses from contractors to an August 2006 Request for Information to gauge industry capability for producing MRAP vehicles. MRAP contracting officials stated that they initially intended to purchase 1,185 vehicles. However, MRAP requirements increased significantly after the solicitation was issued.

MCSC received 10 proposals in response to the solicitation, and on January 25, 2007, MCSC awarded 9 IDIQ contracts³ for up to 1,500 CAT I and 2,600 CAT II MRAP vehicles per year for 1 base year and 4 option years from each of the following contractors:

- Protected Vehicles, Inc. (PVI),
- Oshkosh Truck Corporation (OTC),
- General Dynamics Land Systems – Canada (GDLS-C),

²An in-depth review focusing primarily on the Marine Corps urgent need requirements process for MRAP prior to the initial Joint Universal Operational Needs Statement was addressed in a separate DoD IG audit report, D-2009-030, “Marine Corps Implementation of the Urgent Universal Needs Process for Mine Resistant Ambush Protected Vehicles,” December 8, 2008.

³ One proposal was excluded from consideration based on a combination of weaknesses and deficiencies regarding technical approach and delivery schedule for MRAP vehicles.

- BAE Systems Land and Armaments, LP (BAE),
- Armor Holdings, Inc. (AHI),⁴
- FPII,
- International Military and Government LLC (IMG),⁵
- Textron Marine and Land Systems, and
- General Purpose Vehicles (GPV).

Each contractor was required to produce four production-verification test vehicles (two CAT I and two CAT II vehicles) for survivability and mobility testing; the total cost of the 36 test vehicles, including cost for services and supplies required for testing, was \$88 million.

The Assistant Secretary of the Navy (Research, Development, and Acquisition) approved the issuance of low-rate initial production (LRIP) orders against the contracts before obtaining Government testing results to accelerate production of the lower risk material solutions. As of June 30, 2008, MCSC had placed 27 LRIP delivery orders against 7 of the 9⁶ contracts for a total of 13,905 vehicles, at a cost of \$9.1 billion. Funding obligated for vehicle contract line item numbers (CLIN) as of June 30, 2008, totaled \$7 billion and the funding obligated for non-vehicle CLINs totaled \$2.1 billion. Table 1 below shows the breakdown of vehicles per contractor.

Table 1. MRAP Contracts

<u>Contractor</u>	Vehicles <u>Ordered</u>	<u>Obligated Amount*</u>
PVI	10	\$23,348,052
OTC	100	[REDACTED]
GDLS-C	620	[REDACTED]
BAE	2,218	[REDACTED]
AHI	2,862	\$1,632,213,639
FPII	[REDACTED]	\$1,803,188,075
IMG	5,214	[REDACTED]
Total	13,905	\$9,125,357,435

*This column represents the total cost of the delivery orders awarded to each contractor including vehicle costs, services, and supplies as of June 30, 2008.

⁴ AHI is the parent company of Stewart and Stevenson Tactical Vehicle Systems, which was one of the nine contractors contracted for MRAP vehicles. AHI was purchased by BAE in 2007.

⁵ In March 2008, IMG's name changed to Navistar Defense, LLC; however, for the purposes of this report we will refer to them as IMG.

⁶ GPV failed to deliver test vehicles on time; Textron Marine and Land Systems vehicles did not pass MRAP testing. Textron's contract was terminated for convenience, and the vehicles were sold back to Textron at a reduced cost.

MRAP Program Management

In November 2006, the MRAP Joint Program Office (JPO) was established to manage the acquisition of MRAP vehicles to meet Army, Air Force, Navy, Marine Corps, and Special Operations Command (SOCOM) needs. MCSC manages the JPO and MRAP procurements for all Services. On May 2, 2007, the Secretary of Defense designated the MRAP vehicle program the highest priority DoD acquisition program stating that all options to accelerate the production and fielding of MRAP vehicles to theater should be identified, assessed, and applied where feasible. On May 30, 2007, the MRAP Task Force was formed at the direction of the Secretary of Defense to integrate planning, analysis, and actions to accelerate the acquisition of as many MRAP vehicles as possible. The Chairman of the Task Force is the Under Secretary of Defense for Acquisition, Technology, and Logistics.

MRAP Vehicle Requirements

MRAP vehicle requirements have evolved from the October 26, 2006, combined JUONS for 1,185 MRAP vehicles. On May 10, 2007, the Joint Requirements Oversight Council (JROC) reviewed and approved a Joint Service requirement for 7,774 MRAP vehicles. On September 5, 2007, the JROC reviewed and approved the interim Army requirement for 10,000 MRAP vehicles, for a total of 15,374 MRAP vehicles (3,700 for Marine Corps; 10,000 for Army; 544 for Navy; 697 for Air Force; 333 for SOCOM; and 100 for ballistic testing). On March 31, 2008, the JROC reviewed and approved multiple revised service requirements for MRAP vehicles, for a total of 15,771 MRAP vehicles (2,225 for Marine Corps, 12,000 for Army, 544 for Navy, 558 for Air Force, 344 for SOCOM, and 100 for ballistic testing). For a complete discussion of the evolution of Army and Marine Corps MRAP requirements, which account for the largest number of MRAPs, see Finding B of this report.

Review of Internal Controls

We determined that a material internal control weakness in the award of MRAP contracts existed as defined by DoD Instruction 5010.40, “Managers’ Internal Control (MIC) Program Procedures,” January 4, 2006. Specifically, MCSC officials awarded nine firm-fixed-price IDIQ contracts in January 2007 for MRAP vehicles but did not properly determine that contract prices were fair and reasonable. In addition, MCSC officials did not choose an appropriate contract type for the MRAP procurement. Furthermore, MCSC contracting officials did not attempt to obtain cumulative quantity pricing discounts from one of the contractors. We discuss these issues in detail in Finding C. Implementing Recommendations 1., 2., 3., 4., 5., 6., 7., 8., and 9. should correct these control weaknesses. We will provide a copy of this report to the senior official responsible for internal controls in the Department of the Navy.

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Finding A. Actions Taken to Accelerate Mine Resistant Ambush Protected Vehicle Delivery

MRAP officials took effective actions to accelerate delivery of MRAP vehicles. In May 2007, the Secretary of Defense designated the MRAP program as the Department of Defense top acquisition priority; consequently, MRAP officials implemented actions to accelerate vehicle delivery to users and aggressively attempted to deliver 3,603 MRAP vehicles by December 31, 2007. Specific actions taken by MRAP and other DoD officials to accelerate delivery included the following:

- The JPO developed an acquisition strategy to maximize production efforts by awarding IDIQ contracts to multiple vendors primarily based on the contractors' technical approach; this effort to maximize vehicle production accelerated the delivery of MRAP vehicles significantly.
- The JPO accelerated early production of MRAP vehicles by issuing multiple⁷ LRIP orders against the MRAP contracts so that the contractors could develop and sustain a production workforce, while the Government concurrently performed operational tests.
- MRAP officials implemented several strategies to address material shortfalls, such as priority allocation of industrial resources, incentives to increase material production, and close monitoring of lead times associated with procuring major vehicle components.
- The JPO provided one MRAP contractor with a monetary incentive to upgrade facilities for the purpose of increasing vehicle production.

The combination of actions executed to address the urgent need for accelerating the delivery of MRAP vehicles to theater were innovative and effective. As a result, this report does not include recommendations related to the accelerated delivery of MRAP vehicles.

Accelerated Delivery Results

~~(FOUO)~~ The JPO faced challenges early in the program resulting in late deliveries by all contractors. The JPO implemented aggressive contractual delivery schedules to meet the theater demand for MRAP vehicles as directed by the Secretary of Defense. However, the JPO was unable to meet its production goal of producing up to 750 vehicles per

⁷ The JPO has continued to award delivery orders on an LRIP basis because full testing has not been completed. The JPO acknowledged that this strategy inherently involves risks associated with sustainment and maintenance of MRAP vehicles.

month by the end of September 2007; the Government accepted 401 (53 percent) of 750 vehicles in September 2007. Reasons for delivery delays included overly aggressive schedules, engineering changes to vehicles, and material shortages. Furthermore, contractors who agreed to deliver vehicles on a weekly schedule rather than a monthly schedule to prevent vehicle backlog at Space and Naval Warfare Systems Command, Charleston, could not meet the revised contractual obligations. As a result, contractors delivered vehicles late, the MRAP contracting officer revised contractual delivery schedules for all contractors, and the contractors provided consideration to the Government when accountable for delays.

(FOUO) December 2007 MRAP vehicle production data illustrates the success of JPO efforts to address the urgent need for accelerated delivery of vehicles to the theater. FPII production of the Joint Explosive Ordnance Disposal Rapid Response Vehicle⁸ in 2006 averaged [REDACTED] vehicles per month. In contrast, FPII's MRAP vehicle production for the month of December 2007 was [REDACTED] vehicles. Also, monthly vehicle production across MRAP contractors increased significantly from 173 vehicles in July 2007 to 1,189 vehicles in December 2007. As of December 31, 2007, the Government accepted 3,479 MRAP vehicles (97 percent) of the 3,603 vehicles that contractors were contractually obligated to deliver according to their original delivery schedules. In addition, the JPO was largely able to meet the monthly production rate goal of 1,200 vehicles per month by December 2007. The Government accepted 1,189 (99 percent) of 1,200 vehicles in December 2007. Table 2 illustrates the quantity of vehicles accepted monthly from February through December 2007.

Table 2. Quantity of Vehicles Accepted Monthly During 2007

<u>Month</u>	<u>Vehicles Accepted</u>
February	10
March	19
April	48
May	64
June	72
July	173
August	204
September	401
October	456
November	843
December	1,189

⁸ The FPII predecessor vehicle to the MRAP vehicle was the Joint Explosive Ordnance Disposal Rapid Response Vehicle.

Indefinite-Delivery, Indefinite-Quantity Contracts to Multiple Vendors

MCSC awarded IDIQ contracts to nine contractors primarily based on source selection officials' assessment of the technical capabilities documented in the contractors' proposals.⁹ The contracts required each contractor to produce two CAT I and two CAT II vehicles for survivability and mobility testing. Prior to testing, the JPO assessed the production capability of the nine contractors and began procuring vehicles through LRIP orders to maximize vehicle production and accelerate the delivery of MRAP vehicles. The JPO issued LRIP orders to seven¹⁰ of the nine contractors.

Low-Rate Initial Production

The JPO accelerated early production of MRAP vehicles by issuing multiple LRIP orders against the MRAP contracts so that contractors could develop and sustain a production workforce, while the Government concurrently performed operational tests.¹¹

Criteria

Section 2400, title 10, United States Code (10 U.S.C. 2400) states that LRIP is the minimum quantity of a new system necessary (1) to provide production for operational test and evaluation, "(2) to establish an initial production base for the system, and (3) to permit an orderly increase in the production rate . . . sufficient to lead to full-rate production upon the successful completion of operational testing." DoD Instruction 5000.2, part 3.8.3, "LRIP," states that LRIP quantities exceeding 10 percent of the total production amount must be reported to Congress and approved by the milestone decision authority, who assesses the cost and benefit of a break in production versus continued procurement. LRIP orders allow the program office to bypass statutory requirements for full-rate production that require operational tests be completed prior to full-rate award.

¹⁰ The contracting officer terminated the contract with GPV in a no-cost settlement after GPV failed to deliver test vehicles on time. The contracting officer terminated the contract with Textron Marine and Land Systems because the four vehicles did not pass testing.

¹¹ The JPO determined from the Industrial Capability Assessment that AHI had limited surge capability due to existing production efforts of other vehicles, and [REDACTED]

[REDACTED] Subsequent to achieving favorable testing results, the JPO issued LRIP orders to AHI and IMG.

MRAP LRIP Orders

The JPO procured MRAP vehicles under LRIP at full-rate quantities in order to maximize production efforts and accelerate delivery of vehicles to the warfighter. Although the law does not prohibit LRIP purchases for more than 10 percent of full production quantities, it does require the milestone decision authority to justify and approve the quantity. Consequently, the milestone decision authority for the MRAP program reviewed and approved each LRIP order before award. MRAP officials acknowledged the risks associated with issuing LRIP orders for multiple variants of MRAP vehicles from seven different contractors before operational testing was complete.

Approximately 1 week after the MRAP contracts were awarded in January 2007, the JPO initiated a rapid Industrial Capability Assessment to assess and validate contractor production capability at each contractor site. The JPO assessed survivability from available test data, design maturity, and production capability and risk. The JPO Industrial Capability Assessment identified preliminary concerns with IMG and AHI that prevented the contractors from participating in LRIP 1 and LRIP 2. Consequently, the JPO recommended LRIP orders to the Assistant Secretary, who authorized LRIP 1 on February 9, 2007, and LRIP 2 on February 21, 2007, before MRAP vehicle testing began at Aberdeen Proving Grounds. The Assistant Secretary authorized LRIP 1 for a total of 215 vehicles consisting of four different variants:

- 15 BAE CAT I vehicles,
- 75 BAE CAT II vehicles,
- [REDACTED] FPII CAT I vehicles, and
- [REDACTED] FPII CAT II vehicles.

For LRIP 2, the JPO briefing to the Assistant Secretary addressed the low risk of issuing delivery orders to GDLS-C and OTC because both contractors had proven production processes and production lines in place. JPO officials stated that they accepted the most risk with the delivery order to PVI because PVI did not have a proven production line. According to the MRAP program manager, the JPO accepted the risk because PVI employed a new technology that could have proven to be a significant development in vehicle armor. The Assistant Secretary authorized LRIP 2 for a total of 180 vehicles consisting of four different variants:

- 10 GDLS-C CAT I vehicles,
- 10 GDLS-C CAT II vehicles,
- 100 OTC CAT I vehicles, and
- 60 PVI CAT II vehicles.

The JPO procured 395 MRAP vehicles (8 different variants) from 5 of the 7 contractors under the first 2 LRIP orders. The JPO subsequently excluded two of the contractors (OTC and PVI)¹² from receiving future vehicle orders and eliminated three types of vehicles (OTC CAT Is, PVI CAT IIs, and GDLS-C CAT Is) from future consideration. The JPO accelerated production by quickly identifying several contractors that could begin producing MRAP vehicles and contribute to the goal of accelerating vehicle delivery to the theater.

The MRAP program manager stated that, as the MRAP program evolved, program officials became more capable at evaluating vehicles with regard to survivability, human factors, and production. The JPO continued to issue LRIP orders for MRAP vehicles under the authorization of the Milestone Decision Authority. From April 2007 through March 2008, the JPO issued LRIP 3 through LRIP 11.

Strategies to Prevent Material Shortfalls

DoD officials implemented several strategies to address material shortfalls, including priority allocation of industrial resources and incentives to increase material production.

The availability of vehicle parts and materials was a concern for MRAP officials. In April 2007, the Defense Contract Management Agency (DCMA) released an MRAP Industrial Capability Assessment, which identified that the availability of major MRAP vehicle components common to all contractors, such as steel, axles, ballistic glass, and tires could be a potential choke point for MRAP vehicle production.

(FOUO) The DoD exercised several strategies to prevent bottlenecks from occurring. On June 1, 2007, the Secretary of Defense authorized the Department of the Navy to use the DX industrial priority rating for the MRAP program. A DX-rated program is of the highest National Defense urgency and requires special attention for the program to reach and maintain established production rates or quantities. The DX rating gave the MRAP program priority in obtaining equipment and raw materials for production. In addition, the Defense Logistics Agency utilized its sole-source tire privatization contract with Michelin North America for MRAP vehicle tires and tire-related support. The Defense Logistics Agency also incentivized Michelin by providing \$4 million to purchase additional tire molds and various equipment so the company could meet current and projected demands. Furthermore, DoD obligated \$200 million to increase the capacity and availability of P900 steel and high, hard steel for MRAP vehicles. The procurement

¹²The Government considered automotive and human factors issues of OTC vehicles so significant that changes needed to be made to the vehicles that would cause unacceptable delays to future production orders. As a result, the Government decided not to order any additional vehicles subsequent to 100 vehicles ordered under delivery orders 0001 and 0002. PVI was unable to meet contractual obligations and on December 4, 2007, the contracting officer terminated the contract for default. Of the 60 vehicles purchased, only 10 vehicles had been delivered to the Government prior to contract termination.

plan for the \$200 million included a ramp-up of P900 steel and high, hard steel industrial base through procurement and facilitization of existing and potential sources of supply.

Facility Expansion Incentive

(FOUO) The JPO incentivized one contractor¹³ to increase production of vehicles, thereby accelerating the delivery of vehicles to the soldiers in theater. The JPO provided IMG with [REDACTED] million to fund the expansion of the IMG facility in West Point, Mississippi, to increase production capacity from 240 to 600 vehicles per month. On July 20, 2007, the JPO provided IMG a facility expansion incentive for the procurement of 755 vehicles enabling IMG to produce more vehicles simultaneously. [REDACTED]

[REDACTED]
[REDACTED]
IMG did not meet its February 28, 2008, deadline for all vehicles, and the JPO reduced its planned production goals for IMG from 600 to 500 vehicles per month. However, 92 percent (692 out of 755) of the vehicles were delivered by February 2008. As of March 2008, the Government had received or was in the process of negotiating consideration for the late delivery of the remaining vehicles.

¹³ IMG was the only contractor to request a fee for facility expansion for the MRAP program in response to the Government's request to accelerate and increase MRAP vehicle production.

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Finding B. Army and Marine Corps Mine Resistant Ambush Protected Vehicle and Up-Armored High Mobility Multipurpose Wheeled Vehicle Requirements

Army and Marine Corps officials developed MRAP requirements based on theater commander assessments and contractor production capability. Army and Marine Corps officials developed UAH requirements based on theater commander assessments and the continued use of UAHs in combat and noncombat environments.

Army MRAP and UAH Requirements

Army officials developed MRAP vehicle requirements based on theater commander assessments of the number of MRAPs needed to fill UAH combat missions. Joint Staff officials approved the Army requirement for MRAP vehicles based on contractor production capacity and the continual assessment of MRAP vehicle performance by theater end-users, in addition to command assessments.

Army officials developed UAH requirements based on theater commander assessments of mission execution and the fulfillment of Army-wide requirements for combat and noncombat environments.

MRAP Vehicle Requirement Quantity Development

Army Deputy Chief of Staff G-3/5/7¹⁴ officials stated they approved an initial requirement for 2,500 MRAP vehicles in November 2006 in anticipation of an Operational Needs Statement from theater commanders. The Army Deputy Chief of Staff G-3/5/7 officials stated the Army's initial request for 2,500 MRAP vehicles was based on contractor production estimates and the number of MRAP vehicles needed for UAH-specific missions. On November 13, 2006, Army Central Command¹⁵ issued an Operational Needs Statement for 17,770 MRAP vehicles, the total quantity of vehicles needed by theater commanders to fill all UAH mission requirements. The UAH combat missions included combat patrols, convoy security, reconnaissance, and ambulance missions. The Operational Needs Statement documented an operational need for vehicles

¹⁴ The Army Deputy Chief of Staff G-3/5/7 is also known as the Army Deputy Chief of Staff for Operations and Plans, G-3.

¹⁵ Army Central Command is the Army component of the United States Central Command.

that could withstand underbelly attacks to replace UAHs in the United States Central Command area of responsibility.

On May 10, 2007, the JROC approved the Army requirement for 2,500 MRAP vehicles. The Army simultaneously presented to the JROC its intent to increase the MRAP procurement objective to 17,770 vehicles, given the continuing evolution of enemy threats, operational concepts, and Army strategies. According to officials from the Office of the Joint Chiefs of Staff associated with the JROC, the Army requirement for 17,770 vehicles was not approved by the JROC because the council did not want to commit the Army to a large MRAP vehicle procurement objective prematurely. Instead, the JROC advocated constant evaluations of the theater requirement for MRAP vehicles with additional MRAP vehicle purchases to be made as necessary. On September 5, 2007, the JROC approved an increase to the Army MRAP requirement from 2,500 to 10,000 MRAP vehicles. According to Army Deputy Chief of Staff G-3/5/7 officials, JROC approval of 10,000 MRAP vehicles was based on the monthly production capacity of the MRAP vehicle contractors and the quantity of vehicles the contractors would be able to manufacture through FY 2008. The September 5, 2007, JROC memorandum stated that the final procurement objective will be shaped by a continual assessment of changing threat conditions, feedback from theater commanders, and changes in strategic landscape and assigned missions. The JROC memorandum also stated that the JROC endorsed procuring MRAP vehicles at the maximum rate of production until all high priority theater requirements were satisfied.

On February 21, 2008, Army Deputy Chief of Staff G-3/5/7 officials proposed an MRAP vehicle requirement quantity range to the JROC. According to the JROC memorandum issued on March 31, 2008, the JROC reviewed and approved the Army requirement for 10,433 to 15,884 MRAP vehicles based on the future force structure and a mix of MRAP and UAH vehicles. The JROC memorandum also noted that the Army established an interim requirement for 12,000 MRAP vehicles to support the timely fulfillment of theater requirements and mitigate against production delays.

MRAP Vehicle Performance Assessment

On February 14, 2008, Army Deputy Chief of Staff G-3/5/7 received an MRAP vehicle performance report based on initial assessments from theater end-users. The report contained an analysis of end-user assessments of each MRAP vehicle variant; the vehicle mix of MRAPs and UAHs and their respective effects on operational tactics, techniques, and procedures, as well as vehicle formations; and the different MRAP vehicle categories. The report recommended further testing and analysis and continued end-user assessments. A February 2008 memorandum from the Multi-National Corps – Iraq¹⁶

¹⁶ Multi-National Corps – Iraq is the tactical unit responsible for command and control of operations throughout Iraq.

accompanied the MRAP vehicle performance report. The February 2008 memorandum stated that it was too early in the fielding process to provide a definitive final MRAP requirement because the Army had fielded less than 10 percent¹⁷ of its MRAP vehicle requirement, and the vehicles had only 90 days of combat operational experience.

Continued UAH Procurement

Army Deputy Chief of Staff G-3/5/7 officials stated that DoD has been unable to achieve a balance between requirements for vehicle performance, payload, and crew protection on the UAH because continuous upgrades to the armor on the UAH have exceeded the vehicle's maximum weight. Specifically, the armor necessary to meet crew protection requirements exceeds the weight that can be carried on the HMMWV chassis, thereby degrading vehicle performance. According to Army Deputy Chief of Staff G-3/5/7 officials, the Army plans to promote a "mixed vehicle fleet" approach that will include UAHs and MRAP vehicles, with a range of tactical wheeled vehicles offering performance, payload, and protection.

The Army light tactical vehicle authorized acquisition objective is approximately 144,000 vehicles; this includes the basic HMMWV,¹⁸ the UAH, and the future Joint Lightweight Tactical Vehicle.¹⁹ On October 2, 2007, the Army theater requirement for UAHs was 21,625 vehicles. On January 8, 2008, the Army reduced the UAH requirement to 21,123 vehicles²⁰ based on Army Requirements and Resourcing Board instructions to adjust theater UAH requirements monthly based on the number of fielded MRAP vehicles and new operational requirements for UAHs received from theater commanders.

Army Deputy Chief of Staff G-3/5/7 officials stated that the Army continues to purchase HMMWVs to meet its light tactical vehicle requirement for 144,000 vehicles and to maintain its current vehicle fleet size. Army Deputy Chief of Staff G-3/5/7 officials stated that the Army is losing UAHs at a rate of approximately 125 vehicles per month; these UAHs are unfit due to theater environmental conditions, the effects of armor weight on vehicle parts (that is, tire axles, brakes, engines), or battle damage. In addition, many of the UAHs in theater are approaching or have gone beyond their useful operational life.

¹⁷ As of February 2008, the Army fielded less than 10 percent of the Multi-National Corps – Iraq requirement for approximately 12,000 MRAP vehicles.

¹⁸ The Army will purchase HMMWVs with removable add-on armor protection that provides greater flexibility when deploying units. This capability allows the vehicles to be used in both combat and noncombat environments.

¹⁹ According to Army Deputy Chief of Staff G-3/5/7 officials, the Joint Lightweight Tactical Vehicle will have the speed, maneuverability, and mobility of a HMMWV with the protection of an MRAP vehicle. Currently, there are no Joint Lightweight Tactical Vehicles in production.

²⁰ As of April 2008, the total UAH requirement consists of an operational requirement for 19,645 vehicles and an Army Prepositioned Stock requirement for 1,478 vehicles.

Army Deputy Chief of Staff G-3/5/7 officials also stated that approximately 7,000 HMMWVs must be purchased per year in order to maintain the HMMWV element of the 144,000 light tactical vehicle requirement.

Marine Corps MRAP and UAH Requirements

The Marine Corps' initial requirement for MRAP vehicles was developed based on theater commanders' need for vehicles offering increased survivability for Marines operating in hazardous areas and to satisfy operational and training requirements. The Marine Corps adjusted its requirement for MRAP vehicles based on recommendations from field commanders seeking to refine the initial requirement by optimizing force protection and mission flexibility, end-user assessments promoting UAH retention, a decrease in IED incidents, and troop withdrawals.

Marine Corps officials stated that the Marine Corps will continue to procure UAHs regardless of limitations resulting from excessive armor weight because they are the appropriate solution for some mission scenarios. Specifically, UAHs are faster, more maneuverable combat assets compared to MRAP vehicles, and Marine Corps end-users realize greater mission success when using both UAHs and MRAP vehicles. The continued procurement of UAHs is necessary for the fulfillment of nontheater UAH requirements (that is, training and prepositioned stock).

MRAP Vehicle Requirement Quantity Development

On May 21, 2006, the Commanding General, Multi-National Force – West submitted a JUONS for 185 Medium Mine Protected Vehicles. On July 10, 2006, the Commanding General submitted another JUONS for 1,000 MRAP vehicles that created a combined MRAP vehicle requirement for 1,185 vehicles:

[REDACTED] The July 2006 JUONS documented the need for a family of MRAP vehicles (including all three MRAP vehicle categories) to increase the survivability and mobility of military Service personnel operating in hazardous fire areas and to reduce the number of IED casualties within the Multi-National Force – West area of responsibility.

According to Marine Corps Combat Development Command (MCCDC) officials, approval of the joint requirement for 1,185 MRAP vehicles by the Office of the Joint Chiefs of Staff and United States Central Command was delayed to ensure that all joint service requirements were appropriately considered. In order to expedite the approval of the Marine Corps' requirement, Marine Corps Central Command²¹ officials removed the

²¹ Marine Corps Central Command is the Marine Corps component of the United States Central Command.

Marine Corps' requirement for 805 MRAP vehicles from the JUONS and submitted an Urgent Statement of Need to the Commander, MCSC on October 6, 2006, specifically for the Marine Corps requirement. According to MCCDC officials, the Marine Corps increased the MRAP requirement from 805 to 1,022 vehicles on October 24, 2006, based on an operational requirement for Operation Enduring Freedom and additional training assets. On February 6, 2007, MCCDC officials proposed an MRAP vehicle requirement increase from 1,022 to 3,700 vehicles to the Marine Corps Requirements Oversight Council. The increase of 2,678 MRAP vehicles was based on Marine Corps Central Command's need to support surging troop levels in theater and additional home station training support.

On March 5, 2007, the Marine Corps Requirements Oversight Council approved the increased MRAP vehicle requirement for 3,700 MRAP vehicles. MCCDC officials stated that the requirement for 3,700 MRAP vehicles was derived by first calculating the number of CAT I MRAP vehicles that would be required to replace, seat for seat, UAHs with MRAP vehicles (2,985 MRAP vehicles). MCCDC officials then looked at the MRAP requirements for explosive ordnance disposal rapid response vehicles and engineer route reconnaissance and clearance vehicles and calculated the number of all MRAP vehicle categories needed to provide those capabilities (715 MRAP vehicles). On May 10, 2007, the JROC approved the total Marine Corps requirement for 3,700 MRAP vehicles.

MRAP Theater Requirement Adjustment

On November 28, 2007, MCCDC officials prepared an information memorandum explaining the Marine Corps rationale for reducing its MRAP vehicle requirement quantity. According to the memorandum, MCCDC officials attributed the reduction to recommendations from field commanders who sought to refine the initial vehicle requirement with the objective of optimizing force protection and flexibility. MCCDC officials further attributed the requirement reduction to the receipt of end-user MRAP vehicle operational assessments promoting HMMWV retention, a decrease in the number of IED incidents within the Marine Corps area of responsibility, and the withdrawal of Marine Corps battalions from theater. The November 28, 2007, memorandum specifically stated that the Marine Corps did not reduce its MRAP vehicle requirement based on the favorable security environment in Iraq during November 2007.

(FOUO) On February 21, 2008, MCCDC sought JROC approval to reduce the MRAP requirement from 3,700 vehicles to 2,225 vehicles. MCCDC officials informed the JROC that when the original requirement was developed, the Marine Corps had approximately [REDACTED] MRAP vehicles in Iraq for route clearance and explosive ordnance disposal use. [REDACTED]

[REDACTED] MCCDC officials also indicated that theater commanders concluded that the best approach was to employ a mix of vehicle assets (MRAP vehicles and UAHs) based

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on mission and terrain. MCCDC informed the JROC that end-users learned that the MRAP is not the solution for all theater missions. The revised Marine Corps MRAP vehicle requirement was approved by the JROC on March 31, 2008.

Continued UAH Procurement

According to MCCDC officials, the UAH remains a critical theater asset because it provides theater commanders with a degree of speed, maneuverability, and mobility that enables Marines to pursue enemies and interact with the populace in locations the MRAP vehicle is unable to operate. The Marine Corps FY 2008 authorized acquisition objective for HMMWVs was 25,385 vehicles; the theater UAH requirement was █ UAHs. MCCDC officials confirmed that the total UAH theater requirement was satisfied as of September 19, 2007.

According to MCCDC officials, the average service life for a UAH in theater has been reduced by 50 percent (approximately 7 years) as a result of actual usage exceeding original mission profiles. As of November 2007, MCCDC officials noted that the Marine Corps will continue to procure HMMWVs to fill nontheater HMMWV requirements and to compensate for the aging HMMWV fleet. MCCDC officials calculate that the Marine Corps was approximately 2,000 vehicles short of the July 2008 HMMWV requirement. MCCDC officials stated that as a result of projected UAH losses resulting from theater environmental conditions and excessive vehicle usage, the Marine Corps will have an 11,000-vehicle deficit by FY 2015.

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Finding C. Price Reasonableness Determination

Marine Corps Systems Command (MCSC) officials did not properly determine that contract prices were fair and reasonable when they awarded nine firm-fixed-price, IDIQ contracts in January 2007 for various MRAP vehicles. In addition, MCSC officials did not choose an appropriate contract type for the MRAP procurement; a firm-fixed-price contract type was inappropriate because contract officials did not perform adequate price analysis to allow a proper determination of fair and reasonable prices. Contracting officials stated that the contract prices were fair and reasonable because the procurement was competitive and that they performed price analysis on contractor-proposed prices. Because MCSC awarded the contracts for dissimilar vehicles rather than one specific vehicle or a commercial vehicle, adequate price competition did not exist, and MCSC did not adequately evaluate the proposed prices during source selection.

In addition, subsequent to the award of the contracts, MCSC contracting officials [REDACTED]

As a result, DoD has no assurance that prices paid were fair and reasonable and likely paid more than it should have for MRAP vehicles. Additionally, contracting officials' acceptance of offered prices [REDACTED]

Federal Acquisition Regulation Criteria

The Federal Acquisition Regulation (FAR) provides guidance on selecting the appropriate contract type and determining fair and reasonable pricing and adequate price competition.

FAR 16.1: "Selecting Contract Types" and 16.2: "Fixed-Price Contracts"

Contracting officers should select a contract type that will result in reasonable contractor risk and provide the contractor with the greatest incentive for efficient and economical performance. Some of the factors that the contracting officer should consider are:

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- (a) Price competition. Normally, effective price competition results in realistic pricing, and a fixed-price contract is ordinarily in the Government's interest;
- (b) Price analysis. . . . The degree to which price analysis can provide a realistic pricing standard should be carefully considered;
- (c) Cost analysis. . . . Cost estimates of the offeror and the Government provide the bases for negotiating contract pricing arrangements;
- (d) Type and complexity of the requirement. As a requirement recurs or as quantity production begins, the cost risk should shift to the contractor, and a fixed-price contract should be considered;
- (e) Urgency of the requirement. If urgency is a primary factor, the Government may choose to assume a greater proportion of risk or it may offer incentives to ensure timely contract performance;
- • •
- (g) Contractors' technical capability and financial responsibility; and
- (h) Adequacy of the contractor's accounting systems. Before agreeing on a contract type other than firm-fixed-price, the contracting officer shall ensure that the contractor's accounting system will permit timely development of all necessary cost data. . . . This factor may be critical . . . when a cost-reimbursement contract is being considered and all current or past experience with the contractor has been on a fixed price basis.

Firm-fixed-price contracts place full responsibility for performance costs and resulting profit or loss on the contractor. FAR 16.103(b) states that a firm-fixed-price contract should be used "when the risk involved is minimal or can be predicted with an acceptable degree of certainty. However, when a reasonable basis for firm pricing does not exist, other contract types should be considered."

FAR 16.202-2 states that "a firm-fixed-price contract is suitable for acquiring commercial items . . . or for acquiring other supplies or services on the basis of reasonably definite . . . specifications . . . when the contracting officer can establish fair and reasonable prices at the outset, such as when—

- (a) There is adequate price competition;
- (b) There are reasonable price comparisons with prior purchases of the same or similar supplies or services made on a competitive basis or supported by valid cost or pricing data;
- (c) Available cost or pricing information permits realistic estimates of the probable costs of performance; or

(d) Performance uncertainties can be identified and reasonable estimates of their cost impact can be made, and the contractor is willing to accept a firm fixed price representing assumption of the risks involved.

FAR 15.402: "Pricing Policy"

FAR 15.402(a) states that contracting officers must purchase supplies and services from responsible sources at fair and reasonable prices.

FAR 15.404: "Proposal Analysis"

FAR 15.404-1(a) states that the contracting officer is responsible for evaluating the reasonableness of the offered prices and should use price analysis when cost or pricing data are not required. According to the FAR, the contracting officer may use various price analysis techniques and procedures to ensure a fair and reasonable price. FAR 15.404-1(b)(2) describes price analysis techniques the contracting officer could have used:

- i) Comparison of proposed prices received in response to the solicitation.
Normally, adequate price competition established price reasonableness . . .
- ii) Comparison of previously proposed prices and previous Government . . . contract prices with current proposed prices for the same or similar items, if both the validity of the comparison and the reasonableness of the previous price(s) can be established.
- • •
- v) Comparison of proposed prices with independent Government cost estimates.
and
- vii) Analysis of pricing information provided by the offeror.

The FAR states that the first two techniques are preferable; however, if the information on competitive proposed prices or previous contract prices is not available or is insufficient to determine that the price is fair and reasonable, then using the other techniques are appropriate.

FAR 15.403: "Obtaining Cost or Pricing Data"

FAR 15.403-1(c)1(i) states a contract price is based on adequate price competition if two or more responsible offerors submit priced offers that satisfy the Government's expressed requirement and if:

(A) Award will be made to the offeror whose proposal represents the best value
... where price is a substantial factor in source selection; and

(B) There is no finding that the price of the otherwise successful offeror is unreasonable.

Firm-Fixed-Price Contracts for MRAP Procurement

MCSC officials awarded firm-fixed-price contracts for MRAP vehicles, but this type of contract was inappropriate for the MRAP procurement. Firm-fixed-price contracts are normally the best contract type for procuring commercial items or other items with reasonably definite specifications when the contracting officer can establish fair and reasonable prices at the outset. However, MRAP vehicles are not commercial items, and contracting officials did not have cost data or reliable pricing data for determining that the proposed fixed prices were fair and reasonable when the contracts were awarded. MCSC officials stated that the contract prices were determined to be fair and reasonable because they resulted from a competitive procurement. However, fair and reasonable pricing should not have been assumed by contracting officials because adequate price competition did not exist. Adequate price competition exists when two or more offerors submit priced offers for a requirement and the award is made to the offeror whose proposal represents the best value. However, each offeror proposed a different technical solution, and MCSC officials awarded nine separate contracts for contractor-unique technical solutions at nine different contractor-proposed prices. All contracts were awarded firm-fixed-price without price negotiation discussions and without reliable cost or pricing data.

Contractors Assumed Risk

Selecting a firm-fixed-price contract type for the MRAP procurement resulted in the contractors assuming the burden of risk in producing a vehicle that met the MRAP performance specifications. The MRAP Acquisition Strategy/Acquisition Plan described the limited risk to the Government: “In order to support the warfighter’s urgent needs, there is a requirement to award limited production quantities prior to testing to validate the prime contractor’s production capabilities. Should follow-on testing reveal that the vehicles do not meet the requirements; the government may terminate for convenience.” Given the urgent need for the MRAP capability in theater, the top priority assigned to accelerating delivery of the vehicles to theater, and the need for successful testing of the technical solutions against performance specifications, contracting officials should have expected proposed prices to be inflated to cover all of the costs associated with the risks assumed by the offerors. The lack of available, reliable cost or pricing data coupled with the risks associated with these contracts made the MRAP procurement a poor candidate for firm-fixed-price contract award.

The MRAP Source Selection Plan documented the strategy of expediting fielding of the MRAP vehicles by “placing priority on selecting potential vendors for award that can meet the delivery schedule and provide Commercial-Off-The-Shelf (COTS), Government Off-The-Shelf (GOTS), or Non-Developmental Item (NDI) vehicles that can meet or exceed performance specifications. This procurement will use a firm-fixed-price (FFP) indefinite-delivery, indefinite-quantity (IDIQ) type contract with potential award to multiple vendors...” A firm-fixed-price contract type would have been appropriate if the vendors had proposed commercial vehicles; however, the vendors’ proposals were not for commercial vehicles. The strategy did not consider the impact of awarding multiple contracts for Non-Developmental Item vehicles with unique technical solutions and manufacturing circumstances on the decision to select a firm-fixed-price contract type for the procurement of MRAP vehicles.

Consequently, MCSC officials did not choose an appropriate contract type for the MRAP procurement; the MRAP contracts should not have been awarded on a firm-fixed-price basis because the procurement was not for commercial items, and contracting officials did not have the cost or pricing data necessary to perform the analysis to determine whether the contractor proposed prices were fair and reasonable.

Price Analysis

Contracting officials stated that MRAP contract prices were fair and reasonable because the procurement was competitive and that they performed price analysis on contractor proposed prices. However, MCSC contracting officials did not adequately evaluate proposed contract prices, and the decision to award contracts to nine offerors on the basis of best value did not include adequate price analysis as a factor.

MCSC officials stated that price was not a rated factor in the source selection, and that contracts were awarded to all offerors who could meet technical capability requirements. Consequently, price was not a substantial factor in source selection, as required by the FAR for determining that the contract price was based on adequate price competition. As such, determination of price reasonableness during the contract award should have taken on even more importance.

Furthermore, the Source Selection Authority (SSA) made the decision to award contracts to nine offerors on the basis of best value, but the best value decision did not include adequate price analysis as a factor. An e-mail from the lead contracting officer to contracting personnel stated that the SSA “made the determination that [the contract prices] were fair and reasonable based upon [the SSA] making a best value judgment.” The contracting officer stated that the SSA wanted to award contracts to the contractors who met the technical capability requirements and that contract officials did not need to justify prices as fair and reasonable. Though the SSA made the best value decision, the decision did not include adequate price analysis as a factor in the decision; furthermore,

this decision did not relieve the contracting officer of his responsibility for determining fair and reasonable prices.

MCSC officials also developed an Independent Government Cost Estimate (IGCE)²² to determine whether contractor proposed prices were fair and reasonable. The FAR states that a contracting officer can establish fair and reasonable prices when there are reasonable price comparisons with prior purchases of the same or similar items made on a competitive basis or supported by valid cost or pricing data. However, MCSC officials developed the IGCE using price data from a previous sole-source contract with FPII, a contractor from whom MCSC had previously purchased MRAP-like vehicles. [REDACTED]

[REDACTED] Notably, the MRAP Source Selection Evaluation Board Final Report documented the following concerns related to FPII costs based on FPII past performance:



In addition, one MCSC official noted that, due to the unique characteristics of the various technical solutions proposed by the nine contractors, prices should not be compared against each other. Consequently, using previous FPII contract pricing data to develop the IGCE for price evaluation of all MRAP vehicle variants was inadequate and did not consider the unique manufacturing circumstances of each contractor. The price analysis performed by MCSC officials was not supported by valid pricing data, and the analysis was inadequate for determining whether the proposed contractor prices were fair and reasonable.

Proposed Contract Prices Varied Significantly

(FOUO) Contracting officials did not adequately evaluate the proposed contract prices or otherwise properly determine price reasonableness for the variances in prices proposed by the nine contractors. Proposed unit prices for MRAP CAT I vehicle orders for fewer than 200 vehicles varied from as low as \$306,199 to as high as \$1,088,808. Proposed unit prices for MRAP CAT II vehicle orders for fewer than 200 vehicles varied from as

²² The IGCE is the Government estimate of the resources and projected costs a contractor will incur in the performance of a contract.

low as \$424,582 to as high as \$1,244,917. See Table 3 for unit prices proposed by the nine contractors for quantities of 1–200 vehicles.

The contracts did not commit the Government to purchase more than four test vehicles. Subsequent delivery orders were not awarded to the contractor with the highest price vehicle (GPV) because the contractor failed to deliver vehicles on time. In addition, the lowest price contractor (OTC) received a single delivery order for 100 production vehicles; however, significant changes to the vehicles were required, and no additional orders were placed. Consequently, the range of prices paid by the Government for vehicles produced were not as disparate as Table 3 might suggest. However, the contracting officer committed the Government to firm-fixed prices for all future delivery orders without determining the prices were fair and reasonable and that the higher priced vehicles provided additional value.

(FOUO) Table 3. Contractor Proposed Prices
(Quantity of 1–200 Vehicles)

<u>Contractor</u>	<u>Category I Vehicle Price</u>	<u>Category II Vehicle Price</u>
OTC		
AHI		
FPII		
GDLS-C		
BAE		
PVI		
IMG*		
Textron		
GPV		

* IMG subsequently reduced the Category I and Category II vehicle prices voluntarily, and the initial prices were not exercised.

Contracting officials stated that vehicle unit prices varied because of additional features provided by the contractors and because each contractor proposed costs for its unique vehicles. Specifically, contracting officials stated that while all nine proposals met the technical capability requirements in the solicitation, some contractors chose to go beyond the performance specifications and include additional features. One official provided an example, stating that comparing the vehicles was like comparing a Ford to a Mercedes. Of concern, however, is that contracting officials did not perform any analysis indicating that the premiums paid for the additional features related to receiving more value. MCSC officials considered the additional features a bonus for which the Government was willing to pay a premium. The Government could potentially be paying a premium for a

lesser vehicle because adequate price analysis was not performed to determine that the additional features were fair and reasonably priced.

This was not a normal competition because contracting officials awarded contracts to all contractors whose proposals met technical capability requirements, and contractors were not under the normal competitive pricing pressures. The offerors proposed different technical solutions, and contracting officials purchased dissimilar vehicles, stating that the variances in the proposed prices attested to the variety of vehicles being purchased. As a result, contracting officials committed the Government to firm-fixed prices for different vehicles for which historical contract pricing data did not exist.

Price Evaluation Team Reports

MCSC officials established a price evaluation team (PET) to evaluate prices for MRAP vehicle contracts, but the PET did not adequately evaluate proposed prices. The PET reviewed each of the 10 contractor proposals for compliance with the terms and conditions of the solicitation. One proposal was excluded from consideration based on a combination of weaknesses and deficiencies regarding technical approach and delivery schedule for MRAP vehicles. The PET report results did not lead to any negotiation discussions with any offerors on pricing; therefore, the PET report results did not lead to any lower contract prices. The PET reports contained inconsistencies, discrepancies, and errors; consequently, the accuracy and validity of many of the PET conclusions were materially flawed.

Although the PET conclusions were materially flawed, the PET determined that some proposals were not compliant with the solicitation and recommended discussion with one offeror. Specifically:

- Seven offerors for CAT I and seven offerors for CAT II were compliant with solicitation requirements. However, four of the CAT I-compliant offerors and five of the CAT II-compliant offerors required clarifications on zero dollar value CLINs, field service requirements, Government funding expectations on the part of the offeror, and other issues unrelated to price negotiations.
- Two offerors who proposed CAT I and CAT II vehicles were not compliant with solicitation requirements and should not receive contracts because vehicle or support CLIN pricing was not provided or because the contractor proposed conditional pricing.
- The GPV offer was compliant with solicitation requirements but the PET recommended discussion with GPV to obtain a more competitive price.

Contracting officials provided nine e-mail communications documenting that some discussion took place with nine offerors. However, the e-mails discussed delivery

schedule information or other solicitation requirements that required clarification by the offerors to determine compliance with solicitation requirements:



We found that two of the seven contractor proposals determined by the PET to be compliant with the solicitation did not comply with solicitation requirements. In addition, the PET failed to identify significant variances between the proposed prices and the corresponding IGCEs.

The PET incorrectly found two of the nine contractor's proposals to be compliant and recommended contract award. The solicitation stated each offeror must price all CLINs²⁴; however, OTC and PVI failed to offer a price for the technical data CLIN. Written communications from the MCSC Deputy Counsel to the PET stated that offerors who failed to price a CLIN were noncompliant.

Discrepancies Between Proposals and IGCE

(FOUO) The PET failed to identify significant variances between proposed prices and the corresponding IGCEs. Specifically, the PET failed to identify a material error contained in the FPII pricing spreadsheet. The error inadvertently misaligned proposed prices with their corresponding IGCEs and resulted in multiple pricing discrepancies. Consequently, the PET evaluated 20 of 66 proposed prices against the incorrect IGCEs. For example, the PET evaluated the price for CLIN 0104 (CAT I MRAP Option) at [REDACTED] against an incorrect IGCE of [REDACTED] which actually corresponded to CLIN 0301 (CAT I 90 Day Consumables), resulting in a difference of approximately [REDACTED] percent. The PET did not consider the variance significant. We did not receive any documentation indicating that the misalignment error was identified by MCSC officials prior to our audit; the PET report stated that "while individual proposed CLIN prices [varied] from the IGCE CLIN price, none of the differences [were] considered significant to warrant clarifications or discussions." The correct IGCE

²³ The e-mail to GDLS-C requested that GDLS-C officials call the contracting officer to discuss issues related to the proposal; documents provided by MCSC officials did not include details of the contracting officer's issues or concerns.

²⁴ Vehicle CLINs are CLIN 0001 - Category I vehicle, CLIN 0002 - Category II vehicle, CLIN 0300 - ambulance variant, and CLIN 0301 - Special Operation Command vehicle variant. Other CLINs are non-vehicle CLINs, such as for logistics support.

amount for CLIN 0104 was actually [REDACTED] and the correct percentage difference was [REDACTED] percent.

~~(FOUO)~~ MCSC officials stated that differences between CLIN prices among offerors and compared with the IGCE resulted from individual pricing strategies of the offerors and cost differences between proposed solutions. Any significant variation between a contractor proposal and the IGCE should require analysis. In six of the nine contractor proposal evaluations, the PET reports stated that price variances were not significant enough to enter into discussions with the offerors; the PET reports did not address the significance of price variance for the remaining three contractor proposals. Although the PET considered the variances insignificant, the individual proposed CLIN and sub-CLIN prices varied from the IGCE CLIN price, in one case as much as almost 24,000,000 percent. For example, the CAT I and II PET evaluation reports documented a variance of 47,946 percent between CLIN 0023AP (Commercial Technical Manuals) for IMG and the IGCE; the IMG CLIN price was [REDACTED] and the IGCE price was [REDACTED]. The PET evaluation reports also documented a variance of 3,783 percent between CLIN 0032 (Technical Data) for BAE and the IGCE; the BAE CLIN price was [REDACTED] and the IGCE price was [REDACTED]. Although these are extreme examples, 36 CAT I CLINs for IMG exceeded the IGCE by more than 100 percent, and 14 exceeded the IGCE by more than 1,000 percent. In addition, 17 CAT I CLINs for BAE exceeded the IGCE by more than 100 percent, and 9 exceeded the IGCE by more than 1,000 percent. See Appendix B for details on the IMG and BAE CLINs for CAT I and CAT II vehicles that exceeded the IGCE by at least 40 percent.

MCSC contracting officials who prepared and approved the Business Clearance memorandum²⁵ questioned the PET statement on the insignificance of price variances between contractor proposed prices and the IGCE. The memorandum noted that a review of the individual CLINs and sub-CLINs revealed that several proposed prices from various offerors had significant differences between the proposed price and the IGCE price. MCSC officials did not explore these differences, could not explain why they did not explore the differences, and available documentation did not address the issue.

As of December 31, 2007, contracting officials exercised 383 nonvehicle CLINs, valued at approximately \$1.4 billion, on the 7 MRAP contracts. Of 383 exercised CLINs, 116 CLINs, valued at approximately \$1.2 billion (86 percent), had no corresponding IGCE amounts for price evaluation. The remaining 267 exercised CLINs, valued at approximately \$250 million, had corresponding IGCE amounts, but 81 CLINs, valued at approximately \$50 million, were at least 40 percent higher than the corresponding IGCE. The total value of the difference in price from 81 exercised CLINs and their corresponding IGCEs was approximately \$40.6 million.

²⁵ The Business Clearance memorandum documented the source selection process and the basis for contract award for MRAP vehicles. The memorandum was prepared, reviewed, and approved by contracting officials within the MCSC contracting department chain of command.

As a result, the PET conclusions were materially flawed and were inadequate for the SSA to use as a factor for determining best value. In addition, a variance of 40 percent or greater between the offered price and the IGCE may indicate a significant difference between the requirement and what was being offered by the contractor. Notably, an MCSC official acknowledged many CLINs were not yet properly defined at the time of contract award. We believe this clearly indicates that adequate price competition should not have been used as the basis for accepting prices.

Individual PET reports on each contractor did not document whether proposed contract prices were determined to be fair and reasonable with the exception of the PET report on GPV, which stated that GPV prices were well above the IGCE and the average offered price and, therefore, not fair and reasonable. However, the January 8, 2007, Source Selection PET briefing on its summary results concluded that the contract prices for 8 contracts were fair and reasonable. When we asked MCSC officials about discrepancies and errors in the PET reports, they responded that "The PET reports which reference individual offerors cannot be used in a vacuum. Visibility into the individual technical solutions provided by the offerors are needed to determine whether individual pricing strategies are fair and reasonable or are considered significant differences warranting discussion." However, the PET briefing did not address the offerors' technical solutions. The briefing addressed whether each offer was compliant with the solicitation, required clarification, required discussion, whether or not award was recommended without discussion, and whether the contract price was fair and reasonable. The briefing concluded that eight of the nine contract prices were fair and reasonable. The current lead contracting officer reviewed his forensic contracting documents and could not explain how the PET concluded that the prices were fair and reasonable. Our review of the PET analysis, results, briefing to the Source Selection Advisory Council, and other supporting documentation indicated that the fair and reasonable price determination made by the PET team was flawed, inadequate, and did not address individual technical solutions. The fair and reasonable price determination was a factor in the SSA decision to award all nine contracts on the basis of best value without price negotiation discussions. In addition, MCSC awarded a contract to GPV at the GPV-proposed price even though the PET determined that the price was not fair and reasonable, and recommended discussion before awarding a contract. However, the contracting officer terminated the contract with GPV in a no-cost settlement after GPV failed to deliver test vehicles on time.

Independent Government Cost Estimates

The IGCEs, developed by MCSC personnel and used by the PET, were deficient and inadequate for evaluating proposed MRAP contract prices. MCSC officials acknowledged that the IGCEs were a poor estimate of all costs due to the lack of well-defined requirements used in developing the IGCE. We believe, however, that due to the unique characteristics of the various MRAP vehicles, the prices of the vehicles should not have been compared to each other or to a single IGCE.

An MCSC official stated that the IGCE was based on sole-source contract price data from the May 2006 contract with FPII for the Joint Explosive Ordnance Disposal Rapid Response Vehicle (JERRV). The official also stated she used the JERRV contract price information in developing the IGCE and created the IGCE prior to the release of the request for proposal for MRAP vehicles. However, the reliability of the [REDACTED] price as a basis for estimating MRAP costs is questionable based on [REDACTED]

[REDACTED]
In DCAA reports on an [REDACTED]
DCAA found that [REDACTED]

DCAA reported again in [REDACTED]

[REDACTED]
dated [REDACTED]

[REDACTED]
that [REDACTED]

[REDACTED] and DCAA continued to assess [REDACTED] DCAA did not conduct a review of the May 2006 contract costs used to develop the IGCE.²⁶ The results of any contract action in terms of quality and reasonableness of price/cost relies heavily on the accuracy and reliability of the IGCE, particularly since there was no true competition in this case.

Adequate competition can be expected to result in fair and reasonable contract prices. However, an MCSC official stated that they awarded contracts to all offerors that met technical requirements, and price was not a rated factor in the source selection process. The solicitation specifically stated that “the pricing proposed by the offerors will be evaluated, but not rated.” Adequate price competition did not exist, and contracting officials should not have assumed contract prices were fair and reasonable. MCSC contracting officials did not adequately determine fair and reasonable prices for the nine MRAP contracts, given the differences in prices offered, the differences in the vehicles purchased, and the fact that historical industry data for the items purchased did not exist. In addition, the contracting officer intended to award contracts to all of the contractors for their unique MRAP vehicles.

Truth In Negotiations Act

A better approach would have been to obtain cost or pricing data, which would have afforded the Government the protection of the Truth In Negotiations Act, as amended by section 2306a, title 10, United States Code (10 U.S.C. 2306a). The Truth in Negotiations Act allows DoD to obtain cost or pricing data (certified cost information) from Defense contractors to ensure the integrity of DoD spending for military goods and services that

²⁶ DCMA personnel stated that they did not request that DCAA review the May 2006 contract costs because a DCAA report would not be issued before the contracts were awarded. Specifically, DCAA personnel stated that DCAA issued its reports on the May 2005 contract in January and February 2006, which delayed the May 2005 contract definitization. DCMA personnel stated that the deficiencies reported in January and February 2006 still existed in May 2006 and in order to minimize any delay of contract definitization, DCMA did not request DCAA to review the May 2006 contract.

are not subject to marketplace pricing. Since the vehicles were not in production or available in the marketplace, we believe it would have been most appropriate to have used cost or pricing data to establish prices. Contracting officials used the faulty justification that they were not required to obtain cost and pricing data because the MRAP procurement was competitive even though they had pricing concerns related to the IGCEs.

Pricing Discounts

MCSC awarded multiple delivery orders to seven contractors. However, two contractors were excluded from receiving additional vehicle orders due to automotive and human factor issues or inability to meet contractual obligations. Consequently, MCSC awarded multiple vehicle orders to the remaining five contractors: AHI, BAE, FPII, GDLS-C, and IMG.

MCSC contracting officials did not attempt to obtain any cumulative quantity pricing discounts on [REDACTED] even though such discounts were offered by [REDACTED]

[REDACTED] Table 4 shows details on pricing and quantity data for the five contractors.

(FOUO) Table 4. Contractor Summary

Contractor	Were Prices Adequately Evaluated?	Stepladder Price for up to 1,500 CAT IIs	Stepladder Price for up to 2,600 CAT IIs	[REDACTED]	Total Quantity CAT IIs Ordered	Total Quantity CAT IIs Ordered
IMG	No	Yes	Yes	[REDACTED]	4,455	16
BAE ¹	No	Yes	Yes	[REDACTED]	15	1,329
AHI ³	No	Yes	Yes	[REDACTED]	1,154	684
GDLS-C ²	No	Yes	Yes	[REDACTED]	10	10
FPII	No	Yes	Yes	[REDACTED]	[REDACTED]	[REDACTED]

¹BAE also received orders for 259 SOCOM variant vehicles and 128 ambulance variant vehicles that are not reflected in Table 4 because these vehicle categories had separate pricing stepladder tiers.

²GDLS-C also received orders for 295 CAT II (with CAT I seating) vehicles and 305 CAT II South African variant (with CAT I seating) vehicles that are not reflected in Table 4 because these vehicle categories had separate pricing stepladder tiers.

In addition, MCSC contracting officials did not attempt to obtain corresponding volume pricing discounts from [REDACTED] in excess of the maximum quantity stated in the contracts.

Volume Pricing Discounts for Quantities Exceeding Contract Maximum

MCSC contracting officials failed to obtain corresponding volume pricing discounts from IMG and FPII for quantities ordered in excess of the 1,500 maximum quantity allowed on their contracts. The contracts stated:

The Government shall purchase a "minimum" quantity of two (2) Category I and two (2) Category II Vehicles for this contract within 30 days after contract award. The "maximum" quantity of Mine Resistant Ambush Protected (MRAP) vehicles for this contract shall not exceed 1,500—Category I, and 2,600—Category II.

As of December 31, 2007, MCSC contracting officials awarded 5 delivery orders to IMG for a total of 4,455 CAT I vehicles, and 6 delivery orders to FPII for a total of

[REDACTED] CAT I vehicles.²⁷ The contracts specified that the maximum quantity of CAT I vehicles to be ordered under each contract was 1,500. Contracting officials modified the IMG contract twice to increase the maximum number of CAT I vehicles that could be ordered in the base year from 1,500 to 4,000 vehicles.²⁸ Supporting documentation indicated that contracting officials modified the contract²⁹ to increase the base year maximum vehicle order based on a belief that they could purchase up to 20,500 vehicles (4,100 vehicles during the base year and 4,100 vehicles during each of four option years) whenever necessary. Specifically, the contracting officer stated in the modification that the Government was reallocating vehicle quantities from future option years to the base year. However, quantities from future unexercised options may not be legally borrowed. The Government exceeded the maximum quantity provided by the contract resulting in a violation of the scope of the contract. The additional quantities purchased exceeded the contract maximum by so much ([REDACTED] from FPII and 2,955 from IMG) that it is unlikely to have been reasonably anticipated by the offerors. Therefore, the additional quantities should have been competed to ensure fair and reasonable prices or justified on a sole-source basis to comply with the Competition in Contracting Act of 1984, as amended by Public Law 98-369, as implemented in the FAR.

²⁷ The numbers of delivery orders and vehicles do not include the first delivery orders awarded for two test vehicles per category.

²⁸ The IMG contract was modified on October 19, 2007, to increase the maximum number of CAT I vehicles that could be ordered from 1,600 to 2,500; the IMG contract was modified a second time on December 17, 2007, to increase the maximum number of CAT I vehicles that could be ordered from 2,500 to 4,000. The first modification increased the CAT I maximum from 1,600, but the original contract stated that the maximum was 1,500; the contracting officer stated that the maximum stated in the first modification was in error.

²⁹ Contracting officials executed both modifications to the IMG contract after the delivery orders for the vehicles were placed, and contracting officials failed to modify the contract to include the purchase of 455 vehicles over the modified maximum of 4,000 vehicles.

More importantly, the contracting officials did not make any attempt to negotiate fair and reasonable prices for the Government when they ordered more vehicles than allowed by the contract. Either competition of the requirement or a sole-source justification would have provided the Government with the opportunity to negotiate a fair and reasonable price. When the contracts were first awarded, the risk of performance to develop a vehicle that had not been produced before was placed solely on the contractor by using a firm-fixed-price contract. It would be expected in this type of risk shifting that the contractor would inflate the expected costs to cover the unknown risks of development. While not an appropriate contract type at the outset, by the time the modification was negotiated, the risks and costs were known and this presented an opportunity for the Government to obtain reliable cost or pricing information in order to establish a fair and reasonable price. At a minimum, if urgency did not allow time to obtain this information, the Government should have sought to obtain discounts in line with those being offered by the other contractors.

MCSC officials stated that they saved the Government \$127.3 million by paying base year prices instead of the higher option year prices for the increased number of vehicles purchased in the base year. However, the vehicles were purchased in the base year, and the number of vehicles ordered in excess of the initial contract maximum was significantly beyond the contract scope. Prudent business practices would dictate that the buy be recompeted or, at a minimum, the price renegotiated to ensure a fair and reasonable price for the increased number of vehicles. Furthermore, the contracting officer could have placed the delivery orders against one of the other contracts to avoid exceeding the maximum order quantity. When we asked contracting officials why they did not order these vehicles from a different contractor, they stated that the users preferred specific vehicles manufactured by IMG and FPII. The unique characteristics of the preferred vehicles may have justified a sole-source procurement for the additional vehicles. Nevertheless, MCSC contracting officials should have either obtained an additional pricing discount corresponding to the quantity ordered when the delivery orders were placed or negotiated a fair and reasonable price for new delivery orders once the quantity exceeded the maximum order quantity stated in the contract.

Cumulative Quantity Pricing Discounts

MCSC contracting officials did not attempt to obtain cumulative quantity pricing discounts on the FPII delivery orders. [REDACTED]

[REDACTED] Only the BAE contract provided the combined quantity of vehicles in the delivery order at the corresponding higher level of unit pricing. [REDACTED]

[REDACTED] Table 5 shows the five contractors and the prices for the different quantities according to the contract.

(FOUO) Table 5. Contractor CAT I Stepladder Tiers

Contractor	Stepladder Tiers	Unit Prices	Percentage Reduction	Cumulative Reduction
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

*IMG voluntarily revised its pricing structure three times during contract execution, this is the most current structure, and two out of five production delivery orders awarded to IMG used this price structure. We used this stepladder price structure in our analysis of pricing discounts offered by IMG.

BAE Offered Cumulative Quantity Discounts

(FOUO) BAE offered cumulative quantity discounts across delivery orders and vehicle variants. For example, BAE received delivery order 0003 for a total of 441 vehicles: 255 CAT II vehicles, 170 SOCOM variant vehicles, and 16 ambulance variant vehicles. BAE previously received delivery order 0002 for 15 CAT I vehicles and 75 CAT II vehicles.

[REDACTED]

³⁰ BAE only offered a stepladder pricing structure for quantities up to 333 SOCOM variant vehicles.

[REDACTED] This cumulative quantity discount resulted in a savings to the Government of \$32 million.

(FOUO) BAE also offered cumulative quantity discounts across delivery orders for delivery order 0004 [REDACTED]

[REDACTED] This cumulative quantity discount resulted in a savings to the Government of \$10.6 million.

[REDACTED]
(FOUO) [REDACTED]

[REDACTED]

[REDACTED]

(FOUO) [REDACTED] AHI received delivery order 0002 for a total of 1,170 vehicles: 1,154 CAT I vehicles and

³¹ (FOUO) [REDACTED]

³² (FOUO) [REDACTED]

16 CAT II vehicles [REDACTED]

[REDACTED] This cumulative quantity discount resulted in a savings to the Government of \$603,856 for the 16 CAT II vehicles.

(FOUO) MCSC officials stated that AHI delivery orders did not include cumulative quantity discounts across vehicle variants per delivery order. Specifically, MCSC officials stated that the 1,154 CAT I vehicles ordered under delivery order 0002 were actually CAT II vehicles; therefore, the entire delivery order was for CAT II vehicles, and was subject to cumulative quantity discounts of the same category, not cumulative quantity discounts across vehicle variants. However, AHI contract modification number P00007 establishes the newly reconfigured CAT II as a CAT I vehicle with a new CAT I vehicle price. [REDACTED]

GDLS-C Offered Cumulative Quantity Discounts

(FOUO) GDLS-C also offered cumulative quantity discounts across vehicle variants. GDLS-C received delivery order 0003 for a total of 600 vehicles: 295 CAT II vehicles and 305 CAT II South African (S.A.) variant vehicles. The GDLS-C contract specified separate stepladder pricing structure for the CAT II and the CAT II S.A. variants. The [REDACTED]

[REDACTED] This cumulative quantity discount resulted in a savings to the Government of \$2.1 million.

(FOUO) MCSC officials stated that GDLS-C delivery orders did not include cumulative quantity discounts across vehicle variants per delivery order. Specifically, MCSC officials stated that the GDLS-C CAT II and CAT II S.A. variants were both CAT II vehicles and, therefore, cumulative discounts across vehicle variants did not apply. However, the CAT II and CAT II S.A. vehicles were different CAT II variants with different stepladder pricing structures. The Government did not pay the CAT II unit price for 295 vehicles or the CAT II S.A. unit price for 305 vehicles. Instead, the Government paid the cumulative discounted price for 600 vehicles and saved \$2.1 million.

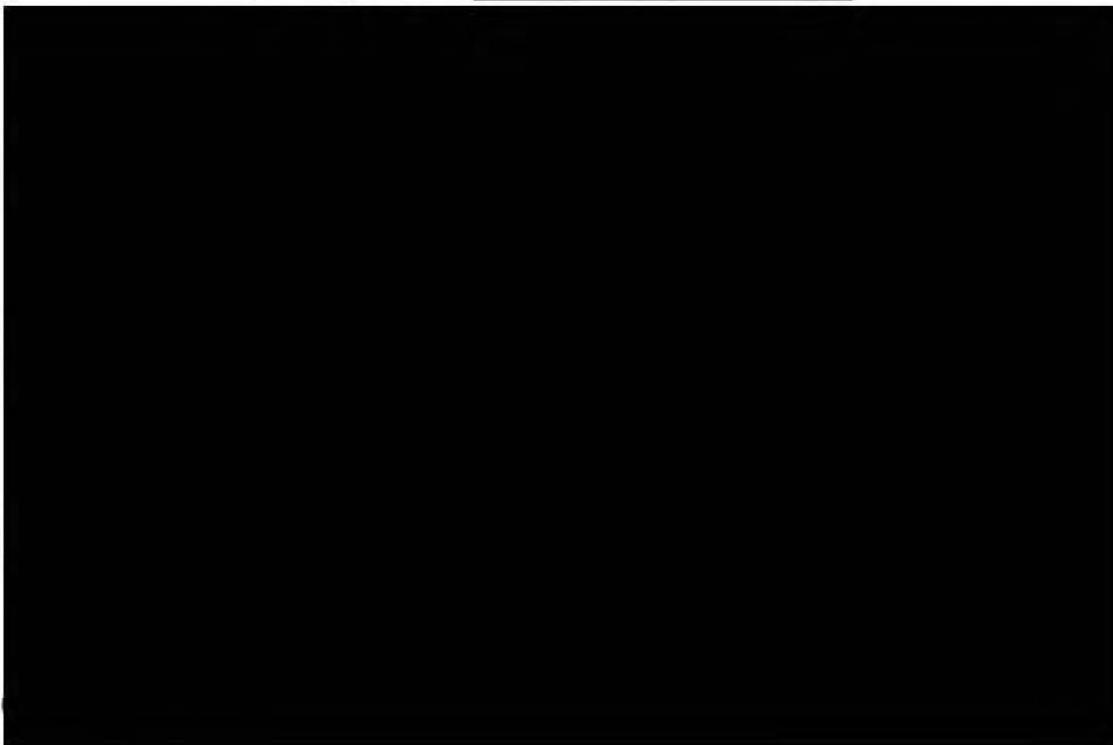
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~~(FOUO)~~ Table 6. Savings From Contractor Offered Cumulative Quantity Price Discounts

Contractor	Cumulative Vehicles Ordered Before Delivery Order 0003	Delivery Order 0003 Vehicles Ordered by Variant	Unit Price Per Variant Based on Quantity	Unit Price Paid With CQDP ¹	Actual Savings From CQPD ¹

~~(FOUO)~~

~~(FOUO)~~ Table 7.



Conclusions

MCSC took an innovative and appropriate approach to awarding contracts to all contractors whose offers demonstrated technical capability, which encouraged new vendors to enter the market for MRAP vehicle production, a key goal for the Department. However, MCSC officials did not select an appropriate contract type and did not properly determine that contract prices paid for the MRAP vehicles were fair and reasonable. Though the SSA made a best value decision, the decision did not include adequate price analysis as a factor in the decision; furthermore, the SSA decision did not relieve the contracting officer of his responsibility for determining fair and reasonable prices. We identified significant indicators that the contract prices paid may not be fair and reasonable. Specifically, a variety of prices were paid for a variety of vehicles, and CLIN price comparisons to IGCEs should have resulted in recommendations to negotiate with offerors on lower prices. Additionally, some contractors voluntarily offered discounts across vehicle variants per delivery order that were not required in the original contract. While this is not evidence that the MRAP contract prices were overinflated, it does raise concerns about price reasonableness, especially in this case where an inappropriate contract type was executed, adequate competition did not exist, and price analysis was not properly performed.

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MCSC officials noted that the MRAP requirement increased significantly after the solicitation was issued in November 2006. The surge in MRAP requirements necessitated a revision to the acquisition strategy for procuring an increased number of MRAP vehicles. Nevertheless, the solicitation stated, "The Government may select other than the lowest price, acceptable offer if it is determined that the superior capability is worth the additional price. However, the Government will not make an award at a significantly higher price to achieve only slightly superior performance capability." The firm-fixed-price contracts awarded to the nine contractors for MRAP vehicles varied significantly, and contracting officials did not perform any analysis indicating that the premiums paid related directly to superior performance capability. Furthermore, MRAP vehicles were not commercial vehicles and the contracting officials did not have cost data or reliable pricing data for determining that the proposed fixed prices were fair and reasonable when the contracts were awarded. MCSC officials awarded nine separate contracts for contractor-unique technical solutions at nine different contractor-proposed prices. All contracts were awarded firm-fixed-price without price negotiation discussions.

In addition, the contracting officer should have tried to obtain additional volume discounts corresponding to the quantity ordered or negotiated fair and reasonable prices during contract execution based on the increased quantity of vehicles needed.



During discussions with MCSC officials on a discussion draft of this report, one senior official agreed that there was no assurance on whether the prices paid for MRAP vehicles were fair and reasonable, but that the top priority of the source selection was rapid production and fielding of the MRAP vehicles. We do not dispute the urgent need to get MRAP vehicles to the warfighter. We agree with the acquisition strategy to encourage new vendors to manufacture MRAP vehicles and establish an industry base of vendors with MRAP production capabilities. We support the MCSC leadership decision to procure and evaluate as many alternative test vehicles as possible to maximize the number of safe vehicles that might make it through performance testing. However, MCSC officials did not take appropriate steps to ensure that the Government paid fair and reasonable prices for MRAP vehicles. When unique items are acquired for which no marketplace exists to regulate pricing, the contracting officer should not depend on the fact that there are multiple offerors proposing uniquely different items to ensure a fair and reasonable price. The contracting officer was responsible for ensuring that the Government paid fair and reasonable prices for the MRAP procurement, and MCSC contracting officials failed to ensure that the prices paid for MRAP vehicles were fair and reasonable.

Client Comments on the Finding and Our Response

The Assistant Secretary of the Navy (Research, Development, and Acquisition) and the Commander, Marine Corps Systems Command commented on statements in Finding C of a draft of this report. The Office of General Counsel, DoD Inspector General (IG), reviewed the comments and recommended that the audit team solicit comments concerning the fair and reasonable contract price determination from the Office of Defense Procurement Acquisition Policy (DPAP), Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics [OUSD(AT&L)]. On November 21, 2008, the Assistant Inspector General, Acquisition and Contract Management requested that the Director, DPAP review and comment on Finding C of the draft report. On December 12, 2008, the Director, DPAP provided comments on Finding C of the draft report. See Appendix D for complete text of the Assistant Inspector General, Acquisition and Contract Management request. See the Client Comments section of the report for the complete text of the DPAP, OUSD(AT&L); Assistant Secretary of the Navy (Research, Development, and Acquisition); and Marine Corps Systems Command (MCSC) comments.

Assistant Secretary of the Navy (Research, Development, and Acquisition) and Marine Corps Systems Command Comments

The Assistant Secretary of the Navy (Research, Development, and Acquisition) [ASN(RDA)] responded to the draft report and agreed with comments from the Commander, MCSC. The ASN(RDA) specifically disagreed with the finding of inadequate price competition for the MRAP contracts. The ASN(RDA) stated that adequate price competition occurred to ensure fair and reasonable pricing of proposed MRAP vehicles on the basis that the Government received 10 proposals, more than the 2 required by the FAR for adequate price competition to have occurred. The ASN(RDA) also stated that “neither statute nor regulation states that adequate price competition exists only if there is more than one offeror for the exact same product or service.” The ASN(RDA) also stated that price was a factor in the solicitation and was reviewed by the contracting officer.

The Commander, MCSC responded to the draft report and took issue with several points in the finding. The commander stated that their strategy regarding the adequacy of price competition and fair and reasonable pricing was supportable and appropriate for the MRAP program. The commander stated that “the full and open competition conducted by MCSC in which ten proposals were received provided the contracting officer with a reasonable and rational basis for concluding that adequate price competition existed.” The commander stated that the FAR provides that adequate price competition may exist when an offer is received with the expectation of competition and the offeror believed that more than one offeror was capable of submitting a meaningful offer. The commander encouraged the input of the DoD Office of General Counsel on this matter.

The commander acknowledged that the use of prior sole-source pricing data from the JERRV procurement could not be properly considered an independent cost estimate. The commander stated that despite the differing prices from various offerors, MCSC is confident that the competitive pressures of the market place provided the Government with reasonable pricing. The commander also noted that the draft audit report incorrectly lists the price of the initial test vehicles as [REDACTED] million when it was actually [REDACTED] million. The commander further stated that the initial competitive market place as well as the continuing competition from the multi-award strategy has allowed the Government to obtain MRAP vehicles at reasonable prices.

The commander stated that with the contracting officer's determination that the receipt of 10 proposals constituted adequate price competition, the Government was prohibited from implementing the Truth In Negotiations Act and requiring cost or pricing data from the offerors. Further, he stated that the second exception to the Truth In Negotiations Act would have applied to many of the MRAP subcontractors who were supplying commercial items to the MRAP contractors.

The commander noted that the contracting officer reasonably determined that a fixed-price contract was appropriate for the MRAP vehicle procurement. He stated that using a cost type contract would have had the effect of limiting competition because of FAR requirements that contractors have approved accounting systems. [REDACTED]

[REDACTED]
[REDACTED]
[REDACTED] there may have been estimated savings of [REDACTED] million. The commander stated that the contracting officer was able to obtain savings of approximately \$127 million by procuring additional CAT I vehicles at base year prices.

Our Response

The essence of the Navy and the Marine Corps positions is summed up in one sentence of the ASN comments: "Neither statute nor regulation states that adequate price competition exists only if there is more than one offeror for the exact same product or service." While it is true that there could be adequate price competition where there is only one offeror or where the product offered is not exactly the same, the sentence leaves out other factors that must be considered. First, in order to ensure competition is based on price, the requirement must be defined appropriately. If the item is commercial, this is not normally a problem. While the MCSC officials treated these vehicles as if they were commercial or nondevelopmental, the reality was that a wide variety of technical approaches were permitted that would be associated with a developmental effort. We are not saying that the products had to be exactly the same, just that there had to be a

mechanism for determining whether each offeror's price was fair and reasonable. Where the items offered are dissimilar, this determination is made more difficult, and there needs to be consideration of how to obtain useful price data when writing the requirement (for example, define the requirement as a commercial item with modifications and then get cost or price data for the modifications only); otherwise, obtaining cost or pricing data will be necessary.

We contend that there was no effective price competition. The "competitors" produced different vehicles, making a price comparison difficult (this was not attempted, and we did not say it should have been attempted). In addition, the prior contracting effort was a sole-source contract with inadequate pricing data for that product, which itself was a different vehicle than those produced by the other contractors. Just having a number of contractors designing technical solutions does not mean that there is price competition. In order to rely on the results of the competition to determine a fair and reasonable price, the competitors should be offering essentially the same product. Because the vehicles were dissimilar, there should also be a marketplace where the contracting officer can judge that competition has succeeded. Without an effective commercial marketplace, how can the contracting officer determine whether a fair and reasonable price was achieved? We have outlined the mechanisms for doing so in our report.

The commander stated that despite the differing prices from various offerors, MCSC is confident that the competitive pressures of the marketplace provided the Government with reasonable pricing. The commander also stated that the initial competitive market place as well as the continuing competition from the multi-award strategy has allowed the Government to obtain MRAP vehicles at reasonable prices. However, there is no baseline or evidence to support the validity of these statements. While the range of prices that were awarded differed less than those that were originally offered, this is not evidence of competitive pricing for many reasons, the most important being that the events that eliminated the highest price vendor from receiving delivery orders were unrelated to either price or any marketplace.

The commander also noted that the report incorrectly lists the price of the initial test vehicles as \$88 million when it was actually \$23 million. This information is presented in the Background section of the draft report under the heading "Procurement History" and refers to the total cost of the delivery orders for the 36 test vehicles, to include vehicle costs, services, and supplies. We validated that the \$88 million was for the test vehicles and for services and supplies specifically required for those vehicles and related testing. To clarify, we revised the statement, stating that "the total cost of the 36 test vehicles, including cost for services and supplies required for testing, was \$88 million."

The ASN(RDA) stated that price was a factor in the solicitation and was reviewed by the contracting officer. However, the Request for Proposal clearly states that "the non-price factors, collectively, are of significantly greater importance than price." Management's position is that adequate price competition occurred, yet potential offerors were notified in writing (via the Request For Proposals) that price was the least important factor in a

competition for which there was no marketplace or commercial data. In addition, we found no evidence that the contracting officer performed any price review other than the IGCE comparison that was inadequate and poorly executed. Furthermore, the FAR clearly states that for the contract price to be based on adequate price competition, award will be made to the offeror on the basis of best value where price is a substantial factor in source selection. The source selection official documented the decision to award contracts to nine offerors on the basis of best value, but price was not a substantial factor in the MRAP contractor source selection. Price was a non-rated factor in the solicitation; as a result, proposed prices were not adequately evaluated (prices could not be evaluated based on the decision to use a firm-fixed-price contract for a procurement that had no marketplace data or cost or pricing data to support proposed prices). Awards were made to nine offerors at the prices proposed by the offerors without any price negotiation discussions (even to the contractor identified by the PET as having a price so high as to be not fair and reasonable). The Government agreed to pay one contractor \$306,000 for a CAT I vehicle (tier 1 price) and another contractor \$1.1 million for a CAT I vehicle (tier 1 price); contracting officials had not performed any analysis to determine whether the higher priced vehicles provided additional value. In fact, they could not perform the analysis because they did not have the data to do so.

The commander claimed approximately \$127 million in savings related to MCSC's procurement of additional CAT I vehicles at base year prices. However, the additional vehicles were bought using unexercised options. The rationale for using unexecuted option quantities is illegal. No contract option quantities may be used where the option has not been exercised. If the contract had been properly modified to allow for an increase in contract maximums, the contracting officer may have been able to obtain a discount on the base year step ladder pricing based on economies of scale. Like the statement that pricing of the vehicles was fair and reasonable, there is no rational basis provided to support cost savings by improperly "borrowing" quantities from an unexecuted option. This was simply a scope change that was improperly handled.

In his comments, the commander requests that the DoD IG seek the legal opinion of the DoD General Counsel. We disagree that this is a legal issue needing interpretation. There is no dispute over the applicable sections of the FAR. We do believe, however, that DoD officials responsible for contracting policy should be made aware of the issues. Consequently, we requested a policy decision from the Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics.

Defense Procurement Acquisition Policy, Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics Comments

The Director, DPAP, OUSD(AT&L) commented on statements in Finding C of the draft report. He agreed with our conclusion that MCSC officials did not properly determine that contract prices were fair and reasonable when they awarded nine firm-fixed-price, IDIQ contracts. He stated that the determination of whether contract prices are fair and reasonable should be made by the contracting officer based on analysis of the proposals submitted. He stated that the contracting officer must conduct a cost/technical trade-off analysis to determine the best value offer(s) as required by the FAR. Further, he stated that the contracting officer cannot assume that prices are fair and reasonable simply because multiple offers were received. The director did not agree that the use of firm-fixed-price contracts was inappropriate. He stated that the use of firm-fixed-price contracts would be appropriate if proper cost and/or price analysis was conducted to determine fair and reasonable pricing. In addition, the director agreed that the MCSC contracting officials should have sought discounts when the quantities procured were in excess of the annual quantity maximum in the contract. He stated that additional training and policy guidance is necessary to address these issues.

Our Response

The report stated that firm-fixed-price contracts were not appropriate for the MRAP vehicle procurement because MRAP vehicles were not commercial items, and contracting officials did not have cost data or reliable pricing data for determining whether the proposed fixed prices were fair and reasonable when they awarded the contracts. In addition, as discussed in the Finding C of the report, the price analysis performed by MCSC officials was not supported by valid pricing data, and the analysis performed by contracting officials was inadequate for determining whether proposed prices were fair and reasonable. We would not have challenged the award of firm-fixed-price contracts for the MRAP procurement if proper price analysis had been performed to determine fair and reasonable contract prices.

Recommendations, Client Comments, and Our Response

We recommend that the Commander, Marine Corps Systems Command direct the Assistant Commander for Contracts to:

- 1. Ensure that future procurements for Mine Resistant Ambush Protected vehicles are properly competed or justified on a sole-source basis.**

Commander, Marine Corps Systems Command Comments

The Commander, Marine Corps Systems Command agreed, stating that the Marine Corps Systems Command has already incorporated this recommendation into its acquisition strategies for the MRAP II and sole-source award of MRAP CAT III procurements. He also stated that prices for each part of the competition will be negotiated separately.

Our Response

The comments were responsive, and no further comments are required.

- 2. Emphasize to contracting officers the importance of making price reasonableness determinations and ensuring cost or pricing data are requested as required by Federal Acquisition Regulation Part 15, “Contracting by Negotiation,” for future Mine Resistant Ambush Protected vehicle procurements.**

Commander, Marine Corps Systems Command Comments

The Commander, Marine Corps Systems Command agreed, stating that the Assistant Commander for Contracts has communicated the importance of this issue to the Contracts Directorate. He also stated that they will complete a thorough, fair, and reasonable price determination for the MRAP (All Terrain) procurement.

Our Response

The comments were responsive, and no further comments are required.

- 3. Direct contracting officials to obtain training on appropriate selection of contract types based on the risks associated with procurement requirements.**

Commander, Marine Corps Systems Command Comments

The Commander, Marine Corps Systems Command agreed, stating that the Assistant Commander for Contracts has communicated the importance of this issue to the Contracts Directorate. He also stated that they have asked the Defense Acquisition University to prepare a senior-level case study of the MRAP acquisition program to discuss alternatives to the contracting strategy previously followed.

Our Response

The comments were responsive, and no further comments are required.

- 4. Review and determine the reasonableness of contractor prices to include obtaining cost or pricing data when necessary and request that the Defense Contract Audit Agency review any proposals before awarding future Mine Resistant Ambush Protected vehicle delivery orders.**

Commander, Marine Corps Systems Command Comments

The Commander, Marine Corps Systems Command agreed, stating that the Assistant Commander for Contracts has communicated the importance of this issue to the Contracts Directorate. He also stated that they are building a framework for the price reasonableness determination that will be used for the MRAP (All Terrain) procurement.

Our Response

The comments were responsive, and no further comments are required.

- 5. Ensure that future competitive procurements consider contract price as a factor for determining best value, as required by Federal Acquisition Regulation Part 15.**

Commander, Marine Corps Systems Command Comments

The Commander, Marine Corps Systems Command agreed, stating that the Assistant Commander for Contracts has communicated the importance of this issue to the Contracts Directorate. He also stated that they will appropriately weigh price and survivability, mobility, maneuverability, production capability, and other factors within the context of the urgent need for the MRAP (All Terrain) procurement.

Our Response

The comments were responsive, and no further comments are required.

- 6. Establish procedures to take appropriate contract action when procurement quantities exceed the maximum quantity allowed in the contract and ensure contracting officers negotiate discounts for the corresponding quantity.**

Commander, Marine Corps Systems Command Comments

The Commander, Marine Corps Systems Command agreed, stating that the Assistant Commander for Contracts has communicated the importance of this issue to the Contracts Directorate. He also stated that they will attempt to build sufficient flexibility into the production contract to deal with both planned and potential quantities.

Our Response

The comments were responsive, and no further comments are required.

7. Establish procedures that address seeking cumulative quantity discounts across delivery orders and regardless of vehicle variants ordered in future contract(s) for Mine Resistant Ambush Protected vehicles.

Commander, Marine Corps Systems Command Comments

The Commander, Marine Corps Systems Command agreed, stating that the Assistant Commander for Contracts has communicated the importance of this issue to the Contracts Directorate. He also stated that they will seek both step and cumulative quantity discounts as part of the Request for Proposals for the MRAP (All Terrain) procurement.

Our Response

The comments were responsive, and no further comments are required.

8. Open discussions with Force Protection Industry, Inc., to negotiate discounts for the quantities of Mine Resistant Ambush Protected vehicles ordered in excess of contract maximum and discounts based on cumulative quantities of vehicles ordered.

Commander, Marine Corps Systems Command Comments

The Commander, Marine Corps Systems Command agreed, stating that the MRAP contracting officer has already contacted FPII on this matter.

Our Response

The comments were responsive, and no further comments are required.

9. Open discussions with Navistar, formerly International Military and Government, LLC, to negotiate discounts for the quantities of Mine Resistant Ambush Protected vehicles ordered in excess of contract maximum.

Commander, Marine Corps Systems Command Comments

The Commander, Marine Corps Systems Command agreed, stating that the MRAP contracting officer has already contacted IMG on this matter.

Our Response

The comments were responsive, and no further comments are required.

Appendix A. Scope and Methodology

We conducted this performance audit from July 2007 through July 2008 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

We evaluated whether Marine Corps Systems Command used appropriate contracting methods to procure MRAP vehicles. We reviewed actions taken by DoD to accelerate delivery of vehicles. We reviewed Army and Marine Corps requirements for HMMWV and MRAP vehicles.

We collected, reviewed, and analyzed documents dated May 2006 through June 2008. We reviewed acquisition documents for a sole-source contract, awarded November 9, 2006, to Force Protection Industries, Inc., and nine MRAP vehicle contracts, awarded January 25, 2007, to the following contractors:

- Force Protection Industries, Inc.;
- International Military and Government, LLC;
- Armor Holdings, Inc.;
- BAE Systems Land and Armaments, LP;
- General Dynamics Land Systems-Canada;
- Oshkosh Truck Corporation;
- Protected Vehicles, Inc.;
- General Purpose Vehicles; and
- Textron Marine and Land Systems.

We reviewed the sole-source award justification, requests for proposals, solicitations, business clearance memorandums, and source selection evaluation reports. We also reviewed price evaluation team reports, delivery documents for MRAP vehicles including receiving reports, delivery correspondence, and delivery schedules to determine timeliness of vehicle deliveries to end users. We also reviewed operational needs statements, urgent universal needs statements, and joint urgent needs statements.

We interviewed contracting and program office personnel at TACOM Life Cycle Management Command and Marine Corps Systems Command. We interviewed the lead procurement contracting officer and other contracting personnel responsible for MRAP contracts. We also interviewed Marine Corp Systems Command MRAP program office personnel including the program manager for the MRAP program. We interviewed Defense Contract Management Agency (DCMA) personnel including administrative contracting officers, industrial specialists, and quality assurance representatives at

DCMA-Canada (London); DCMA-Atlanta, South Carolina Operations Team; DCMA-Chicago; and DCMA-York. We also interviewed personnel from the Offices of the Under Secretary of Defense for Acquisition, Technology, and Logistics; the Army Deputy of Staff for Operations and Plans, G-3/5/7; the Assistant Secretary of the Army for Acquisition, Logistics, and Technology; and the Marine Corps Combat Development Command to identify program background and vehicle requirements.

We reviewed applicable contracting regulations including the Federal Acquisition Regulation, the Defense Federal Acquisition Regulation Supplement, Public Law 98-369, 10 U.S.C. 2306a, and 10 U.S.C. 2400.

Use of Computer-Processed Data

We relied on data from the Electronic Document Access and the Wide Area Workflow systems. The Electronic Document Access and Wide Area Workflow systems are online document access systems. We did not assess the reliability of the systems because we limited our use of the data to determine contract prices and delivery dates. However, not assessing the reliability of the systems did not materially affect the results of the audit.

Use of Technical Assistance

We obtained assistance from the Technical Assessment Directorate of Investigative Policy and Oversight, Department of Defense Office of Inspector General to review and evaluate price reasonableness determination related documentation.

Prior Coverage

During the last 5 years, the GAO, the Department of Defense IG, and the Army Audit Agency (AAA) have issued eight reports discussing armored vehicles. Unrestricted GAO reports can be accessed over the Internet at <http://www.gao.gov>. Unrestricted DoD IG reports can be accessed at <http://www.dodig.mil/audit/reports>. Unrestricted AAA reports can be accessed over at <https://www.aaa.army.mil/reports.htm>.

GAO

GAO Report No. GAO-08-884R, "Rapid Acquisition of Mine Resistant Ambush Protected Vehicles," July 2008

GAO Report No. GAO-08-467SP, "Assessments of Selected Weapon Programs," March 2008

GAO Report No. GAO-06-274, “Lack of a Synchronized Approach between the Marine Corps and Army Affected the Timely Production and Installation of Marine Corps Truck Armor,” June 2006

GAO Report No. GAO-06-160, “Several Factors Limited the Production and Installation of Army Truck Armor during Current Wartime Operations,” March 2006

GAO Report No. GAO-05-275, “Actions Needed to Improve the Availability of Critical Items during Current and Future Operations,” April 2005

DoD IG

DoD IG Report No. D-2009-030, “Marine Corps Implementation of the Urgent Universal Needs Process for Mine Resistant Ambush Protected Vehicles,” December 8, 2008

DoD IG Report No. D-2007-107, “Procurement Policy for Armored Vehicles,” June 27, 2007

DoD IG Report No. D-2007-049, “Equipment Status of Deployed Forces Within the U.S. Central Command,” January 25, 2007

Army

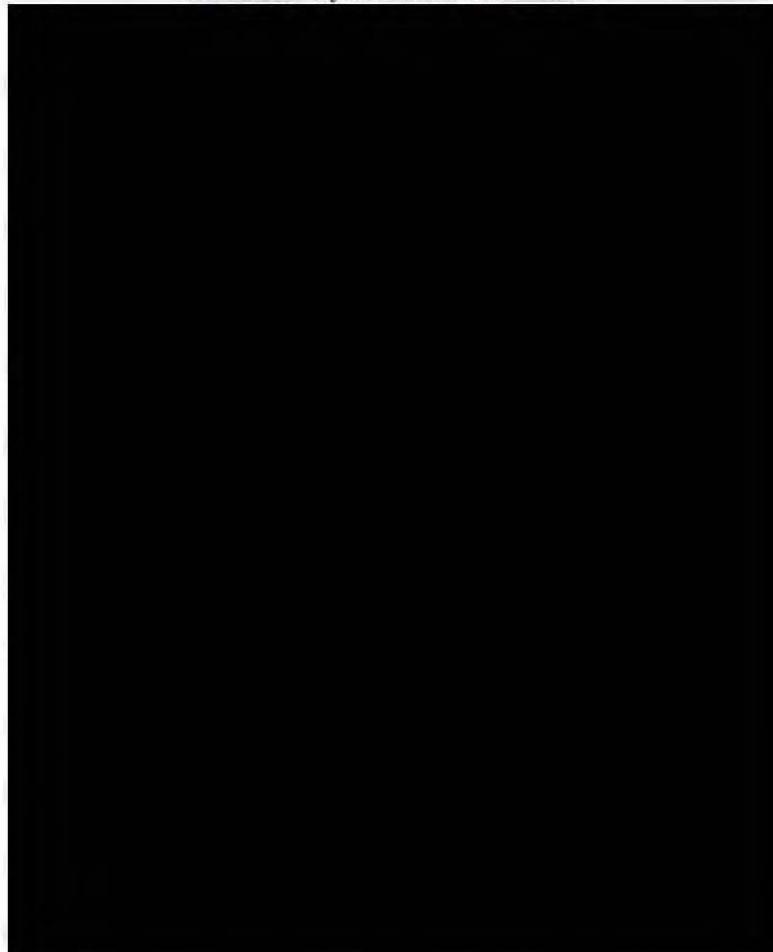
AAA Report No. A-2007-234-ALM, “Tactical Wheeled Vehicle Strategy,” September 26, 2007

Appendix B. Discrepancies Between Proposals and the IGCE

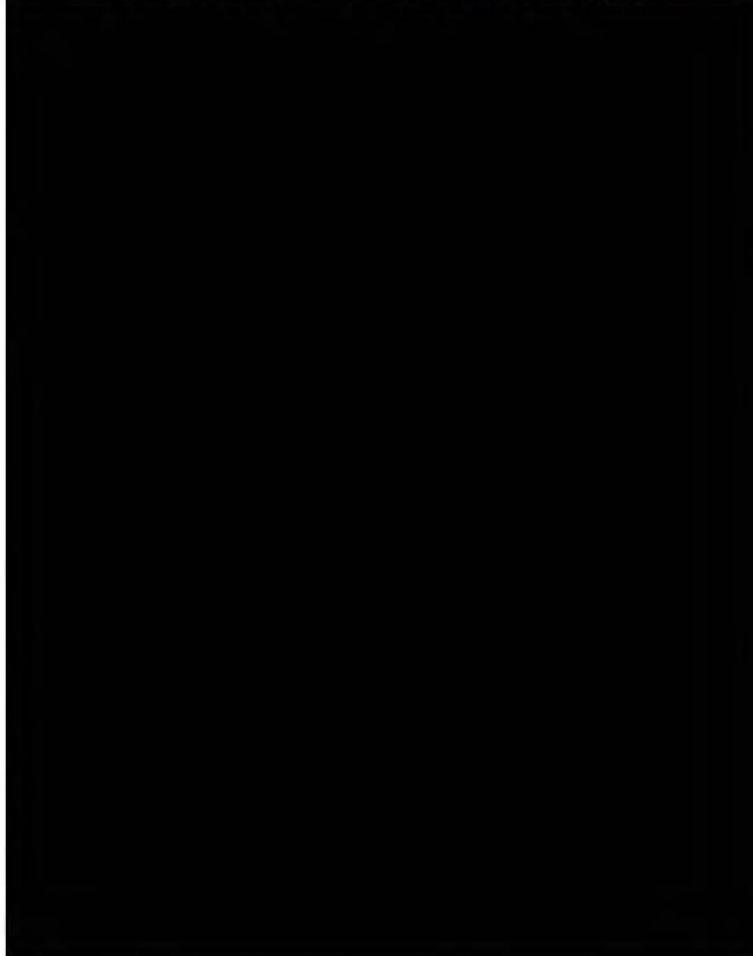
The following tables illustrate the variances between proposed prices for CAT I and CAT II vehicles and the corresponding IGCEs for IMG and BAE. Definitions for some of the nonvehicle CLINs are as follows: 0023AF Engineering Change Proposal, 0023AK Safety Assessment Report/Update, 0023AP Commercial Technical Manual, and 0030 Logistics Start of Work Meeting.

We calculated the following discrepancies between the CAT I and CAT II proposals from BAE and IMG and the IGCE.

~~(FOUO)~~ Table B-1. [REDACTED] That Exceeded the IGCE by at Least 40 Percent

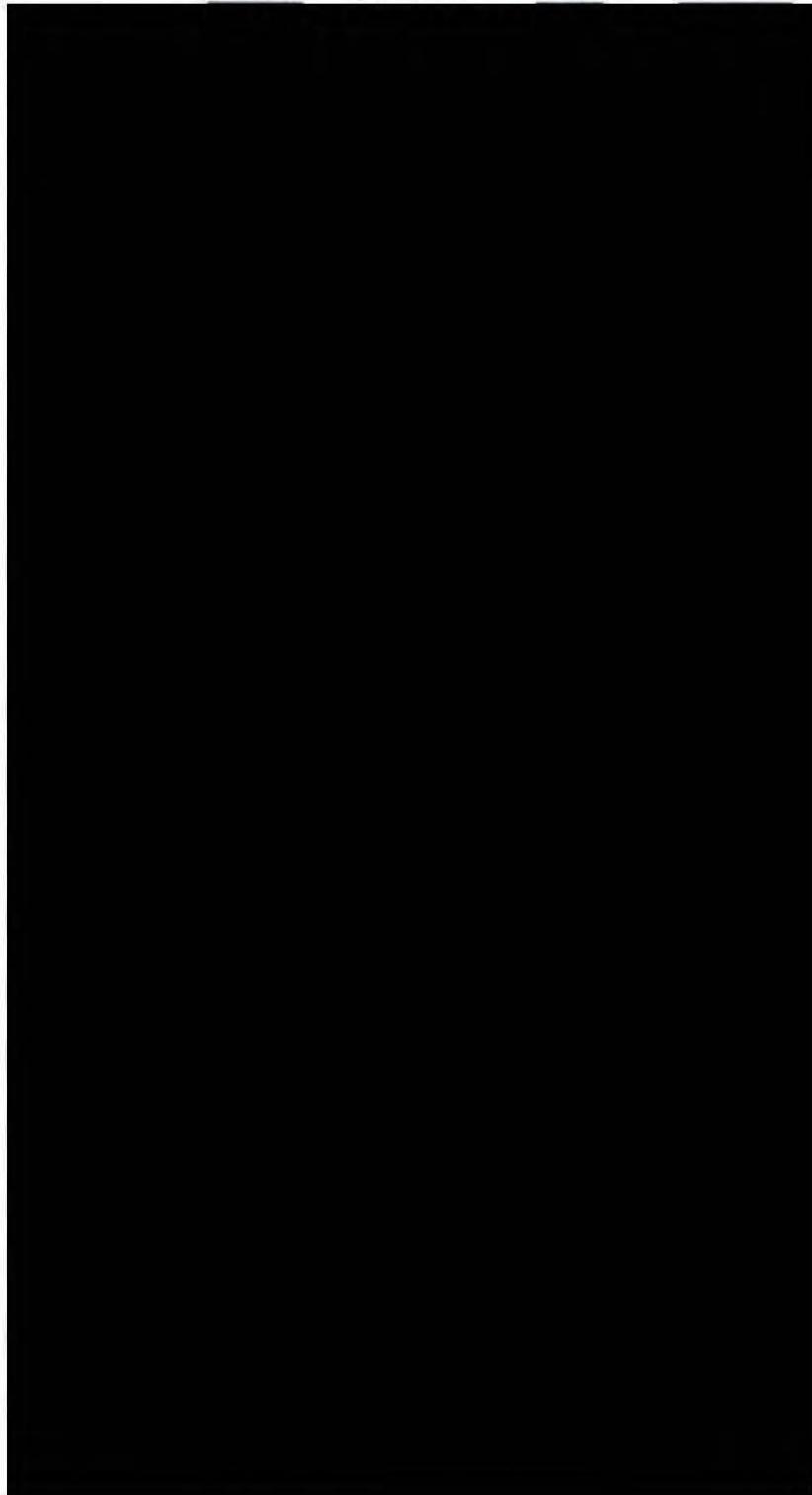


~~(FOUO)~~ Table B-2. [REDACTED] CAT II CLINs That
Exceeded the IGCE by at Least 40 Percent



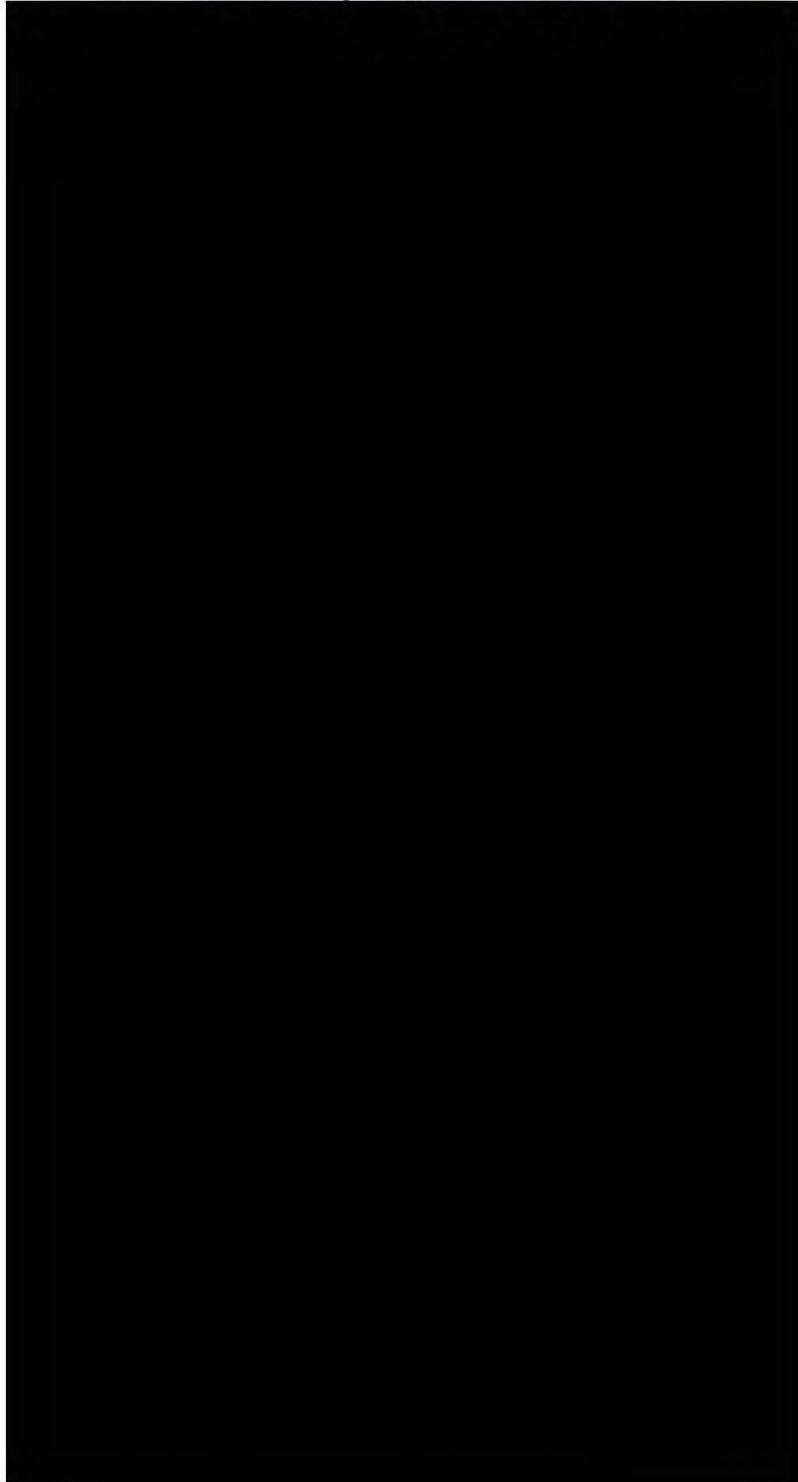
~~FOR OFFICIAL USE ONLY~~

~~(FOUO)~~ Table B-3 [REDACTED] CAT I CLINs That Exceeded
the IGCE by at Least 40 Percent



~~FOR OFFICIAL USE ONLY~~

~~FOUO~~ Table B-4 [REDACTED] CAT II CLINs That Exceeded
the IGCE by at Least 40 Percent



~~FOR OFFICIAL USE ONLY~~

Appendix C. List of Acronyms and Abbreviations

AAA	Army Audit Agency
AHI	Armor Holdings, Inc.
ASN(RDA)	Assistant Secretary of the Navy (Research, Development, and Acquisition)
BAE	BAE Systems Land and Armaments, LP
CAT	Category
CLIN	Contract Line Item Number
DCAA	Defense Contract Audit Agency
DCMA	Defense Contract Management Agency
DPAP	Office of Defense Procurement Acquisition Policy
FAR	Federal Acquisition Regulation
FPII	Force Protection Industries, Inc.
GAO	Government Accountability Office
GDLS-C	General Dynamics Land Systems – Canada
GPV	General Purpose Vehicles
HMMWV	High Mobility Multipurpose Wheeled Vehicle
IDIQ	Indefinite-Delivery, Indefinite-Quantity
IED	Improvised Explosive Device
IG	Inspector General
IGCE	Independent Government Cost Estimate
IMG	International Military and Government, LLC
JERRV	Joint Explosive Ordnance Disposal Rapid Response Vehicle
JPO	Joint Program Office
JROC	Joint Requirements Oversight Council
JUONS	Joint Universal Operational Needs Statements
LRIP	Low-Rate Initial Production
MCCDC	Marine Corps Combat Development Command
MCSC	Marine Corps Systems Command
MNF-W	Multi-National Forces-West
MRAP	Mine Resistant Ambush Protected
OTC	Oshkosh Truck Corporation
OUSD(AT&L)	Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics
PET	Price Evaluation Team
PVI	Protected Vehicles, Inc.
S.A.	South African
SSA	Source Selection Authority
SOCOM	Special Operations Command
UAH	Up-Armored High Mobility Multipurpose Wheeled Vehicle
U.S.C.	United States Code

Appendix D. Memorandum From the Office of Inspector General, DoD Requesting Comments From the Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics



INSPECTOR GENERAL
DEPARTMENT OF DEFENSE
400 ARMY NAVY DRIVE
ARLINGTON, VIRGINIA 22202-4704

NOV 21 2008

MEMORANDUM FOR DIRECTOR, DEFENSE PROCUREMENT AND
ACQUISITION POLICY
DIRECTOR, PORTFOLIO SYSTEMS ACQUISITION

SUBJECT: DoDIG Audit of the Procurement and Delivery of Joint Service Armor Protected Vehicles (Project No. D2007-D000CK-0230)

We issued the subject draft report on September 24, 2008, and received official management comments from the Assistant Secretary of the Navy (Research, Development, and Acquisition) and from the Commander, Marine Corps Systems Command, on November 13, 2008.

Finding C of the draft report, "Price Reasonableness Determination," discusses our conclusion that Marine Corps Systems Command officials did not properly determine that contract prices were fair and reasonable when they awarded nine firm-fixed price IDIQ contracts in January 2007 for various MRAP vehicles. Contrary to the report finding, Navy and Marine Corps officials believe that adequate price competition occurred and that the prices paid by the Government for the MRAP procurement were fair and reasonable.

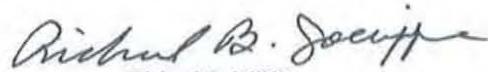
While we disagree with Navy and Marine Corps officials on the primary issue of a fair and reasonable price as it relates to the MRAP vehicle procurement, it is more problematic for future vehicle procurements and maintenance. MRAP program officials have no basis for ensuring that they are getting fair and reasonable prices on their future MRAP vehicle requirements and using the previous contract prices for analysis would be meaningless. Nevertheless, the Commander, Marine Corps Systems Command, clearly stated in his comments his intent to use a firm-fixed price contract type for future MRAP vehicle procurements.

Our primary issue is that there was competition on the MRAP vehicle requirement, but the competition provided no basis for determining a fair and reasonable price. Contracting laws and regulations assume that contracting officials are trying to maximize price competition, rather than looking for ways not to do so.

We respectfully request that your offices review these issues and respond to our draft report, considering the following questions: When acquiring items that are dissimilar and no commercial marketplace exists, may a contracting officer assume that price competition and a fair and reasonable price are achieved where multiple offers are received? What steps are required to ensure a fair and reasonable price in such cases? If

contracting officers should not assume price competition is adequate to determine a fair and reasonable price in such cases, we recommend emphasizing that price competition is a desired goal of DoD acquisitions. In addition, we recommend considering whether training or additional policy is required in this area.

We respectfully request your comments by December 8, 2008. Please direct any questions to [REDACTED] at [REDACTED] (DSN [REDACTED]), e-mail [REDACTED] or me at [REDACTED]



Richard B. Jolliffe
Assistant Inspector General
Acquisition and Contract Management

Navy Comments



THE ASSISTANT SECRETARY OF THE NAVY
(RESEARCH, DEVELOPMENT AND ACQUISITION)
1000 NAVY PENTAGON
WASHINGTON DC 20380-1000

NOV 10 2008

MEMORANDUM FOR DEPARTMENT OF DEFENSE ASSISTANT INSPECTOR
GENERAL FOR AUDITING

SUBJECT: Department of Defense Inspector General (DoDIG) Draft Report D2007-D000CK-0230.000, "Procurement and Delivery of Joint Service Armor Protected Vehicles"

The Department of the Navy (DON) has reviewed the subject DoDIG Draft Report. We appreciate the thoroughness and your findings that support actions taken by the Department to accelerate delivery of life-saving Mine Resistant Ambush Protected (MRAP) vehicles to our Soldiers and Marines. Attached, are the Department's specific comments on the list of DoDIG recommendations which was prepared by the Commander, Marine Corps Systems Command (MARCORSYSCOM). While I concur with the Commander's comments, I would also like to expand upon one particular DoDIG finding, namely the finding that there was inadequate price competition in response to the original Indefinite Delivery/Indefinite Quantity (IDIQ) solicitation for MRAPs.

Contrary to the DoDIG finding, the DON believes adequate price competition occurred to ensure fair and reasonable pricing of MRAPs proposed in response to the solicitation. As described in more detail in the MARCORSYSCOM comments, the government received a total of ten proposals, considerably more than the two required by the Federal Acquisition Regulation (FAR) 15.403-1(c)(1)(i) for adequate price competition to have occurred. Award was ultimately made to nine of the ten offerors, although none of the offerors knew whether MARCORSYSCOM would make multiple awards, or that almost all of the offerors which submitted a proposal would receive a contract. Although offerors proposed different configurations of MRAPs, all proposals had to meet the same specified performance requirements. Neither statute nor regulation states that adequate price competition exists only if there is more than one offeror for the exact same product or service. Instead, the FAR requires that there must be two or more responsible offerors, competing independently, which submit priced offers that satisfy the Government's expressed requirements. That is what occurred in this instance. In addition, the FAR requires that price be a substantial factor in the source selection. While price was not the most important factor in this instance, it was a factor in the solicitation, and was reviewed by the MARCORSYSCOM Contracting Officer.

The DON recognizes that the DoDIG provides a much needed service to the DoD and that differences of opinion over the interpretation of the FAR are part of the process in accomplishing these types of audits. I very much appreciate your willingness to allow DON to comment on your report.



Attachments:
As stated

b(6)

Marine Corps Comments



UNITED STATES MARINE CORPS
MARINE CORPS SYSTEM COMMAND
2200 LESTER STREET
QUANTICO, VIRGINIA 22134-5010

MCSC/LAW
6 Nov 08

From: Commander, Marine Corps Systems Command
To: Office of the Deputy Inspector General for Auditing,
Department of Defense Inspector General, 400 Army Navy
Drive (Room 801) Arlington, VA 22202-4707

Subj: COMMENTS ON DOD IG DRAFT AUDIT REPORT FOR THE PROCUREMENT
AND DELIVERY OF JOINT SERVICE ARMOR PROTECTED VEHICLES

Ref: (a) DODIG Draft Audit Report Project No. D2007-D000CK-
0230

1. We have reviewed reference (a) and agree with the majority of the report's findings and recommendations. We appreciate the DoD IG's finding that "MRAP officials took effective actions to accelerate delivery of MRAP vehicles" and with the conclusion that the Marine Corps Systems Command (MCSC) took an innovative and appropriate approach to awarding contracts to all contractors whose offers demonstrated technical capability, which encouraged new vendors into the market for MRAP vehicle production. The MRAP Program Acquisition strategy was vetted at multiple levels up to and including the DepSecDef. Because the FAR appropriately provides flexibility in the acquisition approach, our view of the DoD IG conclusions is based on the context and risk factors relevant in the vetting process at that time.

2. We agree that the DoD IG has accurately listed the relevant sections of the Federal Acquisition Regulation (FAR) on page 19, but find our strategy regarding the adequacy of price competition and fair and reasonable pricing is also supportable and appropriate for this Program. We believe that the full and open competition conducted by MCSC in which ten proposals were received provided the contracting officer with a reasonable and rational basis for concluding that adequate price competition existed. We do not concur with the DoD IG's statement on page 25 which concludes that contractors were not under the normal competitive pricing pressures because contracts were awarded to all contractors with technically acceptable proposals because none of the offerors knew prior to the announcement of the awards how many contracts would be awarded. FAR 15.403-1(c)(1)(2) provides that adequate price competition may exist

Subj: DoDIG DRAFT AUDIT RESPONSE

with even a single offer when that offer was received with the expectation of competition and the offeror believed that more than one offeror was capable of submitting a meaningful offer. The contracting officer published responses to numerous offeror questions in FEDBIZOPPS prior to the closing date for submission of proposals. All interested parties could tell that there were numerous prospective offerors actively engaged and likely to submit competitive proposals. Since the nature of this disagreement turns upon the legal interpretation of adequate price competition in this context, we would encourage the input of the Department of Defense General Counsel's office on this matter.

3. Notwithstanding our differing view regarding the adequacy of price competition, we understand and to an extent agree with the DoD IG's points regarding the price evaluation conducted for this procurement. We acknowledge that the use of prior sole source pricing from the JERRV procurement could not properly be considered an independent government cost estimate. This information should have been more appropriately considered as previously proposed prices for similar items under FAR 15.404-1(b)(2)(iii). Nonetheless, despite the differing prices from the various offerors, we are confident that the competitive pressures of the market place provided the Government with reasonable pricing. We note that page 4 of reference (a) incorrectly lists the price of the initial 36 test vehicles as \$88M; the correct price for these vehicles was actually \$23M. The initial competitive marketplace as well as the continuing competition from the multi-award strategy has allowed the Government to obtain these highly capable vehicles at reasonable prices. The chart on page 34 of reference(a) which depicts the pricing for the five active vendors of MRAP vehicles highlights the rather narrow range of prices that resulted for these competitively awarded contracts. The average unit prices for the MRAP vehicles are significantly less than the prices for the recently awarded Army Medium Mine Protection Vehicle which is based on the BAE RG-33 and the Textron M1117 Armored Security Vehicles.

4. We understand the finding that suggested obtaining cost or pricing data pursuant to the Truth in Negotiations Act (10 USC 2306a). This finding branches off of the more fundamental finding regarding the adequacy of price competition. Accordingly, because we believe there was adequate price competition, we believe it was not appropriate under the specific context of the then MRAP Program. This statute and its implementing regulation (FAR 15.403-1) does not allow the

Subj: DoDIG DRAFT AUDIT RESPONSE

contracting officer to request cost or pricing data from contractors when there is adequate price competition. With the contracting officer's determination that the receipt of competitive proposals from ten offerors constituted adequate price competition, the Government was prohibited from requiring offerors to submit cost or pricing data. Even if there had not been adequate price competition, a second exception to the Truth in Negotiations Act was applicable for all commercial items in the vehicles. This would have applied to many of the MRAP subcontractors who were supplying items such as axles, motors, transmissions, brakes, doors, windshields, etc. The contracting officer would not be authorized to require cost of pricing from any of the subcontractors who provided commercial items to the MRAP contractors.

5. We agree with the DoD IG that the contracting officer must use the factors listed at FAR 16.104 to determine the appropriate contract type. The DoD IG concluded that the MCSC contracting officer chose an inappropriate contract type for the MRAP procurement. We believe our vetted approach was appropriate. We believe that the contracting officer reasonably determined that a fixed-price contract was appropriate for the MRAP procurement. FAR 16.104(a) provides that normally effective price competition results in realistic pricing, and a fixed-price contract is ordinarily in the Government's interest. Further, had the contracting officer pursued a cost-type contract, FAR 16.104(h) would have required the contracting officer to ensure that the contractor's accounting system would permit timely development of all necessary cost data in the form required by the proposed contract type. As the DoD IG correctly noted on page 24 of reference (a), Force Protection Industries, Inc. (FPII) does not have an approved accounting system. International Military and Government, LLC (IMG) likewise did not have an accounting system in place which would allow it to produce the required cost data for other than a firm-fixed-price contract. This would have had the effect of limiting competition.

6. We understand the DoD IG's finding that the Government should have sought cumulative price discounts from FPII. We acknowledge that if FPII would have been willing to provide cumulative price discounts across categories like BAE and cumulative price discounts across delivery orders like IMG that there may have been an estimated savings of approximately \$45.6M. While recognizing that it may have been more appropriate to exercise the options and then attempt to negotiate lower unit prices, the MCSC contracting officer was

Subj: DoDIG DRAFT AUDIT RESPONSE

able to obtain a savings of about \$127M by entering into bilateral modifications which allowed the Government to procure additional Category I vehicles at lower base year unit prices. To remain within the scope of the MRAP contracts, the MCSC contracting officer monitored all delivery orders to ensure that orders to any single MRAP contractor did not exceed 7,500 Category I vehicles or 13,000 Category II vehicles.

7. We agree with the following recommendations and have provided them within the continuing vetting process of follow on MRAP Program actions. Many of the DOD IG recommendations, including reasonable cost and pricing determination, are partially or fully incorporated in some of MRAP Program ongoing actions. Of note, we are instituting a two-step process for the next MRAP (All Terrain) procurement; purchasing limited MRAP vehicles from a full and open competition for testing and using the recommended extensive cost and pricing process in support of the further selection process. As we stated earlier regarding our disagreement with the DOD IG finding regarding price reasonableness, we would encourage the DOD IG to seek the legal opinion of the Department of Defense General Counsel.

a. Recommendation 1 - We agree that future procurements of MRAP vehicles should be properly competed or justified on a sole source basis. We have already incorporated this recommendation into our acquisition strategies for the competitive award of MRAP II and the sole source award of MRAP Category III vehicles. For MRAP (All Terrain) we will first conduct a full and open competition to buy a small number of test articles from several primes. A second downselect competition will be conducted following testing for production vehicles. Prices for each part of the competition will be negotiated separately.

b. Recommendation 2 - We agree with the importance of making price reasonableness determinations in accordance with FAR Part 15. The Assistant Commander for Contracts has already reiterated the importance of this issue to the Contracts Directorate through official staff communications channels. For MRAP (All Terrain) we will complete a thorough, fair and reasonable price determination. At a minimum, we will use the competitively awarded MMPV and what we learned from MRAP as we awarded modifications.

c. Recommendation 3 - We agree that contracting officers must select contract types based on risks associated with procurement requirements. The Assistant Commander for Contracts has already reiterated the importance of this issue to the

Subj: DoDIG DRAFT AUDIT RESPONSE

Contracts Directorate through official staff communications channels. Additionally, we have asked Defense Acquisition University (DAU) to prepare a senior-level case study of the MRAP acquisition program to discuss any alternatives to the contracting strategy we selected. For MRAP (All Terrain) we will consider contract types other than Firm Fixed Price for test articles, but desire to use firm fixed price contracts for production vehicles.

d. Recommendation 4 - We agree with the need to determine the reasonableness of contractor prices. Contracting officers will follow the FAR in determining price reasonableness and will obtain cost or pricing data as authorized by statute. The Assistant Commander for Contracts has already reiterated the importance of this issue to the Contracts Directorate through official staff communications channels. We are currently building the framework for the price reasonableness determination that will be used for MRAP (All Terrain). We welcome the opportunity to share the framework with DoDIG and seek their comments.

e. Recommendation 5 - We agree that price must be one of the factors considered in making a best value determination. The Assistant Commander for Contracts has already reiterated the importance of this issue to the Contracts Directorate through official staff communications channels and MCSC will conduct competitive source selections in accordance with the FAR. As we plan for MRAP (All Terrain), we will appropriately weight price and survivability, mobility, maneuverability, producibility and other factors within the context of the urgent need.

f. Recommendation 6 - We agree that appropriate action should be taken when procuring quantities that exceed the maximum quantity specified in the contract. The Assistant Commander for Contracts has already reiterated the importance of this issue to the Contracts Directorate through official staff communications channels. For MRAP (All Terrain), we will attempt to build sufficient flexibility into the production contract to deal with both planned and potential quantities.

g. Recommendation 7 - We agree with the recommendation. The Assistant Commander for Contracts has already discussed the importance of this recommendation with the Contracts Directorate. He will ensure that procedures are established to incorporate seeking cumulative quantity discounts across delivery orders regardless of vehicle variants. As part of the

Subj: DoDIG DRAFT AUDIT RESPONSE

MRAP (All Terrain) Request For Proposals (RFP) we will seek both step and cumulative quantity discounts.

h. Recommendation 8 - We agree with the recommendation. The MRAP contracting officer has contacted FPII regarding this matter.

i. Recommendation 9 - We agree with the recommendation. The MRAP contracting officer has contacted IMG regarding this matter.

8. We appreciate the efforts of the DoD IG Audit Team in conducting this procurement review and we will address these recommendations in a timely manner.

M. M. Bogen
M. M. Bogen
Commander
Marine Corps Systems Command

Copy to:
ASN (RDA)
CMC (P&R)
MCSC (DFM)

Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics Comments



OFFICE OF THE UNDER SECRETARY OF DEFENSE
3000 DEFENSE PENTAGON
WASHINGTON, DC 20301-3000

DEC 12 2008

MEMORANDUM FOR ASSISTANT INSPECTOR GENERAL, ACQUISITION AND CONTRACT MANAGEMENT

SUBJECT: DODIG Audit of the Procurement and Delivery of Joint Service Armor
Protected Vehicles (Project No. D2007-D000CK-0230)

Your memorandum of 21 November 2008 requested my review of your finding that concluded the “Marine Corps Systems Command officials did not properly determine that contract prices were fair and reasonable when they awarded nine firm-fixed price IDIQ contracts in January 2007 for various MRAP vehicles.” I concur with your view.

Specifically, you asked the following questions:

- 1) When acquiring items that are dissimilar and no commercial market place exists, may a contracting officer assume that price competition and a fair and reasonable price are achieved where multiple offers are received?
- 2) What steps are required to ensure a fair and reasonable price in such cases?

With regard to the questions asked, the determination of whether prices are fair and reasonable is a matter of contracting officer judgment based upon the analysis of the proposals submitted. It is possible that a contracting officer could find the pricing received on multiple offers against a common requirement for dissimilar, non commercial items to be in fact, fair and reasonable. In this case, however, it is not clear from the record as described in your report that the Contracting Officer took the actions necessary to ensure that fair and reasonable prices were paid. It is not sufficient to simply assume that fair and reasonable prices were paid because multiple firm fixed price offers were received.

The MRAP source selection was conducted on a best value basis. FAR 15.101-1 requires that the contracting officer conduct a cost/technical trade-off analysis to determine the best value offer(s). It does not appear that the trade between price and non-price factors was conducted or, if conducted, was properly documented.



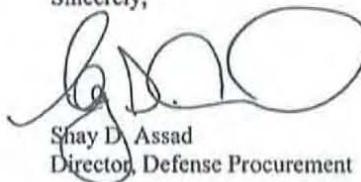
If the required trade-off process had been conducted there should have been an indication amongst the offers with regard to whether the price paid was reasonable in comparison to the benefit gained from the evaluated non-price factors. The offers should have been evaluated against the non-price technical factors and arrayed from best to worst. With this information and the evaluated prices, the contracting officer could have determined the best value offer and could have presumed that the price was fair reasonable in relationship to the other offers submitted.

It is possible that the other offered prices could also be fair and reasonable. As an example, if the second best offer has a lower offered price and the difference between the best offer and this offer is easily explained by the lesser capability of the second offer, that price would also be fair and reasonable. On the other hand, if two offers are basically the same capability, but one has a price significantly higher than the other, it would be difficult to find the higher priced offer fair and reasonable unless there were other factors of importance to the contracting officer (delivery schedule might be such a reason if it were an evaluated factor). The important point is the contracting officer cannot just assume all the offered prices are fair and reasonable simply because they were submitted on a firm fixed price basis; additional analysis would be required.

Absent the justification of prices paid through the trade-off process, it is my view that the Contracting Officer would have to ensure through cost and/or price analysis that the prices paid were fair and reasonable. I do not concur with your view that the use of firm fixed price contracts was inappropriate. The use of firm fixed price contracts would be perfectly appropriate if buttressed with the appropriate analysis to determine fair and reasonable prices.

I also concur with your view that reduced prices should have been sought where the quantities procured are in excess of the annual quantity contracted. I believe that additional training and policy guidance will be necessary to address this matter.

Sincerely,



The image shows a handwritten signature in black ink. The signature appears to be "Shay D. Assad". Below the signature, there is printed text identifying the signer.

Shay D. Assad
Director, Defense Procurement

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Inspector General
Department *of* Defense

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